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**Learning and Applying Financial Metrics to Evaluate Human
Capital Investments: The case of Return on Investment**

Thesis submitted for the degree of Doctor of Philosophy from

The Open University Business School

Faculty of Business and Law

The Open University, UK

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Abstract

Return on investment (ROI) is one of several financial metrics increasingly advocated and used to evaluate expenditures on human capital initiatives. This thesis explored empirically the discrepancy between growing interest in, and uptake of, ROI for human capital investments on the one hand; and evidence to date that implementation is problematic and actual usage limited, on the other.

From within a constructivist/interpretivist paradigm, ten attempts to apply ROI were identified and reconstructed using the qualitative techniques of observations, interviews and document analyses. These attempts were drawn from three different contexts – corporate, health service and international development. Concepts from seminal theories on learning and skills acquisition, knowledge, practice, context and their relationship with each other, as well as the introduction of new technical approaches, were selected to provide a framework to guide the enquiries and interpretation of data.

The study found the term ROI was used as a bridging metric and understood in three ways – metaphorically, as an aspiration of value; literally, as a metric; and procedurally, as a method for planning and evaluating human capital investments. The metaphorical use of ROI was widespread as a way of expressing a common goal when dealing with key stakeholders. However, the metric was rarely utilised to measure human capital investments because applying it was difficult and time consuming; particularly linking the investment and service system performance through people performance. Methodically, ROI seemed to function as an aspirational map for planning and evaluating human capital investments. Learning and applying the method, even partially, was valued and tended to lead to changed behaviour and organisational culture.

Significant variations between the three contexts were noted, and it is argued that the contingencies affecting the uptake and appropriateness of ROI in different settings would likely affect the appropriateness of other financial metrics for evaluating human capital investments.

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1 Introduction: Evaluating the Returns for Spending on People

1.1 Locating the Issues

Evaluation as a professional practice is now well established. This is evident by the existence of organisations, professional associations and consultant networks, such as the United Kingdom Evaluation Society (UKES), the European Evaluation Society (EES), the American Evaluation Association (AEA), the World Bank's Independent Evaluation Group (IEG), and the International Initiative for Impact Evaluation (3ie), the Impact Evaluation Network (IEN), and the Network of Networks for Impact Evaluation (NONIE). In addition, there are a number of journals (e.g. *Evaluation*, *American Journal of Evaluation* and *Evaluation and Program Planning*), conferences (e.g. UKES' and AEA's annual conferences, and EES' biennial conference), as well as academic programmes (e.g. the University of East Anglia's MSc Impact Evaluation for International Development and the Institute of Development Studies short course, *Impact Evaluation Design*) that are dedicated to this practice.

Though well established, it is still a developing field with a wide range of tools and methodologies being advocated and promoted from a variety of practitioners and scholars through different organisations. These tools and methodologies are often found in the international development context for programme evaluation. They are also used in project and policy evaluations in the voluntary and public sectors as well as educational bodies and Learning and Development (L&D) units within organisations in different sectors. For examples of these tools and methodologies, see pertinent publications from esteemed evaluators and scholars (e.g. Chelimsky (2007) and Patton (2002; 2011), as well as the World Bank (e.g. Bamberger (2006), Görgens (2009), Herzberg (2008), and Mackay (2004)), the UK Government through Her Majesty's (HM) Treasury (e.g. HM Treasury (2011)), independent organisations and professional associations such as NONIE (Leeuw and Vaessen (2009)) and the Institute for Employment Studies (IES) (Tamkin et al., 2002).

Throughout the literature a key point of debate and discussion is the particular evaluation approach selected for evaluating an initiative (Armytage, 2011). One of the most widely deployed evaluation approaches is the Logical Framework Approach (LFA), considered by some to be "an all-pervasive tool" (Armytage, 2011, p. 268). The LFA is based on the logic of three interlocking hypotheses (IF-

THEN statements) regarding four levels of objectives: inputs, outputs, purpose and goal(s) (Practical Concepts Incorporated, 1979). At the end of the LFA process a 4x4 matrix, known as the logframe or project matrix, is prepared. It provides a summary of the main project information and activities, and their relationship with each other. The aim is to present the elements of the project in a clear, concise and systematic way (BOND, 2003). Collaboration among senior management, programme managers, project managers, specialists, technicians and project staff in the design and evaluation of projects is encouraged to develop the logframe (DFID, 2009; Practical Concepts Incorporated, 1979). By using the logframe, evaluators can explain the reasons for their initiative and how success will be assessed, i.e. through 'objectively verified indicators', the means of this verification, as well as explaining the assumptions made about factors necessary for success but outside of the control of the project team (BOND, 2003; DFID, 2009; Practical Concepts Incorporated, 1979). Although the LFA, and particularly the logframe, is a concise way of summarizing and communicating the plans and results of an initiative, it has been criticized for being over-simplistic, rigid and for not directly referring to the underlying people-related problems (Armytage, 2011; Dale, 2003; Gasper, 2000).

The debates and discussions in the evaluation literature expose a "paradigm war" between rationalist/positivist and social constructivist schools of thought (Armytage, 2011, p. 270; Paton, 2003). Positivists are interested in getting to the bottom of things and tend to use traditional scientific approaches with experimental methods and counterfactual measurements (Armytage, 2011; Paton, 2003). Constructivists are interested in how people view a phenomenon and the meanings they ascribe to it (Rubin and Rubin, 2005). Therefore, they are concerned with incorporating stakeholders' views, which can be done through methods such as observations and case studies (Armytage, 2011). With these latter types of approaches, performance is constructed by particular measures and "is bound to be partial, contextual and contingent, constituted partly by social processes of its selection and gathering, but also by the lenses of those who interpret it" (Paton, 2003, p. 45).

One example of a positivistic approach is randomised controlled trials (RCTs), which is traditionally used in the scientific field and is deemed the most rigorous and robust evaluation approach by many evaluators and commissioning bodies because of its use of randomised experiments (Davies, 2004; Haynes et al., 2012). However, there has been much debate among evaluators surrounding the appropriateness of RCTs within the fields of anthropology, social sciences, and education (Cook et al., 2010; Scriven, 2008). These debates include the ethical issue of deliberately withholding a

beneficial initiative from a group of persons or the reverse, providing an initiative that can have a negative effect on a group of persons (Cook et al., 2010; Davies, 2004). But, RCT proponents argue that in many cases the benefits or adverse effects are not known, therefore a phased introduction, via a RCT, is best so that the possible outcomes can be determined (Davies, 2004; Haynes et al., 2012).

In response to these types of positivistic evaluation approaches from the 'hard' sciences that advocate an objective, top-down, outsider evaluation on whether an initiative was successful, opposition grew and approaches, such as Participatory Approaches, were developed (Chambers, 1994; Kapoor, 2004; The Informal Working Group on Participatory Approaches, Undated). Participatory approaches have a socially constructed reality, where truth, fact and cause-effect are seen as multi-layered and normative, and results are assessed through negotiated consensus (Kapoor, 2004). They advocate an insider view and the inclusion of multiple perspectives, with stakeholders themselves participating in the planning and implementation of the evaluation. Within these approaches, the focus is on the stakeholders' assessments of their own circumstances, getting a consensus on how it could be improved and working together to evaluate the outcomes and impacts of the initiatives (Chambers, 1994; Kapoor, 2004; The Informal Working Group on Participatory Approaches, Undated; Zukoski and Luluquisen, 2002). These types of approaches are criticised because of the inherent difficulty in trying to extrapolate results to a wider group when the evaluation was planned and carried out with stakeholders who are focused on meeting their particular needs and may use their status to dominate or misuse the evaluation (Leeuw and Vaessen, 2009; Mackay, 2004).

Other key evaluation approaches that are strongly grounded in particular philosophies include Guba and Lincoln's (1989) 4th Generation Evaluation (also called Constructivist Evaluation) and Pawson and Tilley's (1997) Realist Evaluation, which is from the critical realism school of philosophy. Guba and Lincoln's (1989) 4th Generation Evaluation is a process for carrying out an evaluation that has two conditions: 1) it is organised by stakeholders' claims, concerns and issues, and 2) it uses the methodology of the constructivist paradigm. Pawson and Tilley's (1997) Realist Evaluation aims to understand the inner workings of the programme being evaluated regarding what works, for whom, in what circumstances and also in what respects. Although both of these approaches include multiple perspectives, they do so in different ways. Like Participatory Approaches, 4th Generation Evaluation

include stakeholders as agents in the evaluation whereas Realist Evaluation treat stakeholders as sources of information about the programme for the evaluators to appraise (Guba and Lincoln, 1989; Pawson and Tilley, 1997).

These discussions and debates may have spurred on the growth in evaluation approaches as scholars and evaluators develop new approaches that, in their views, better address the various issues in conducting evaluations in different contexts. Furthermore, there appears to be more demand from local, national and transnational government bodies, as well as funders and commissioners from international charities for their funded programmes or initiatives to be evaluated. These demands seem to surround ascertaining the outcomes and impact of an initiative, as well as being able to attribute results to the initiative (Armytage, 2011; Dadd, 2013a; Paton, 2003; White and Phillips, 2012).

One domain where evaluators work is in examining initiatives that are focused, in whole or in part, on changing the lives of particular groups of people. Typically, these initiatives have uncertain outcomes and their efficacy hard to ascertain without being contested. Examples include L&D events (e.g. a customer service workshop), process improvement projects (e.g. to improve waiting times in an accident and emergency (A&E) department) and social change programmes (e.g. to improve the employability skills of marginalised women in a developing country). These initiatives reflect spending on people, which represents an investment in human capital – referred to as human capital investments.

As noted above, evaluation practice encompasses many tools and methodologies; yet relatively few seem to address an apparently increasing concern of stakeholders (e.g. board members, senior managers, commissioners, funders, and taxpayers): what are the returns on investments in human capital? This growing concern of stakeholders could be attributed to the wider transformations in the economies of the world that has been characterised as the rise of neoliberalism, globalization, and financialisation (Epstein, 2005). Financialisation, which is “the increasing role of financial motives, financial markets, financial actors and financial institutions in the operation of the domestic and international economies” (Epstein, 2005, p. 3), seems particularly relevant. It appears that determining the efficacy or impact of an initiative may no longer be sufficient; stakeholders look to

be interested in knowing whether the initiative provides a satisfactory financial return on investment (ROI).

In this study, an ROI approach is one that incorporates the ROI financial metric within its processes to evaluate an initiative, e.g. an investment in human capital. This is part of a wider trend towards the diffusion of the ROI metric to new domains, as will be shown below, and which raises a cluster of issues: can a financial metric really be used in a domain different from where it was created and still be appropriate and meaningful? What is involved in learning and applying a process for using the metric in a new domain? What challenges do different contexts (i.e. sectors or industries) face in applying the metric? This study explored this phenomenon, taking the application of the ROI metric to human capital investments as a case in point.

The argument proceeds as follows. First, the origins of the ROI metric and its diffusion to human capital investments are described, followed by an overview and discussion of the three leading ROI approaches designed for human capital investments in the UK, as well as noting their similarities and differences. A review of the relevant professional and research literature is presented, which shows some major differences of opinion, including over basic empirical questions. This establishes the focal theory (Phillips and Pugh, 2005) to which the study contributes and leads to the formulation of the research questions. Important distinctions and considerations that draw from the previous discussion are then set out. These provide a conceptual framework so that the research questions can be expressed with clarity while taking account of key contextual issues. Finally, in order to show how the argument and analysis will proceed, subsequent chapters are previewed: an overview of the background theory (Phillips and Pugh, 2005) – used to unpack and discuss the phenomenon being explored, the research design (covering the philosophy and methodology), exploratory cases (from three contexts/sectors), findings and discussions, and conclusions of the study.

1.2 The Origins of ROI and its Diffusion to Human Capital Investments

There have been extensive debates spanning decades about whether it is appropriate to treat the contribution of people as capital, leading to the term *human capital* (Kiker, 1966; Nafukho et al., 2004; Schultz, 1961). Human capital can be defined as the knowledge, skills (physical and intellectual),

attitudes and other acquired traits that an individual possesses, that can be used in production (Goode, 1959; Ployhart et al., 2011; Provo, 2000). Therefore, measuring human capital necessitates measuring the knowledge, skills and attitudes of people as these contribute to production. An investment in human capital, such as education or training, provides benefits (referred to as returns) to the person, organisation and/or community/country (Bae and Patterson, 2014; Nafukho et al., 2004). This study focuses on the returns to the organisation and community/country.

The literature covering the evaluation of human capital includes studies at the national/country level, where investments in human capital are investigated (Giziene et al., 2012; Goode, 1959; Kiker, 1966; Octavian and Nicoleta, 2010; Schultz, 1993; Steen and Welch, 2011). In these studies, the emphasis is on the returns the country receives for its investments in its citizens, for example, in education. These researchers have shown that investments in a nation's human capital yield positive returns.

With regards to the literature about human capital investments within organisations, the literature search revealed ongoing research in three key areas: 1) measuring the link between human resource (HR) practices and the organisation's performance and alongside this human capital analytics (Bassi, 2011; Bassi and McMurrer, 2007; Bassi and McMurrer, 2008; Becker et al., 2001; Bowen and Ostroff, 2004; Crook et al., 2011; Delaney and Huselid, 1996; Fitz-enz, 2009a; Guest, 2011; Huselid et al., 1997; Mirvis, 1993; Ployhart and Moliterno, 2011; Swanson, 1998); 2) measuring the value of human capital within organisations (Fitz-Enz, 2009b; Mayo, 2003; Parsons, 1997), and 3) human resource accounting (Mirvis and Macy, 1976a; Mirvis and Macy, 1976b). Recent studies in the UK include the Valuing Your Talent project that is being spearheaded by the Chartered Institute of Personnel and Development (CIPD) (CIPD, 2014a), as well as Deloitte's new Return on Invested Talent (ROIT) metric (Hesketh et al., 2014). These studies use aggregated totals from financial reports for the human capital within the organisation and calculate returns on the aggregated human capital investments or estimates on future values.

While these can be useful for assessing the overall performance of the organisation, it does not help in ascertaining whether particular investment initiatives were effective, improved efficiency and/or produced positive impacts on and/or returns for the organisation (Provo, 2000; Sakalas and Liepé, 2011). For the stakeholders tasked with managing organisations a more granular analysis at the level of the human capital investment initiative would (potentially) be of greater value. This is also

the case for programme managers commissioned to evaluate the impact or returns of investments in human capital in communities/countries, e.g. a social change programme for unemployed youths. Hence the interest in using ROI approaches for these purposes. Nonetheless, whether such approaches, with the ROI metric embedded in their processes, are actually appropriate for this type of investment remains unclear. Therefore, it is important to understand how the ROI metric is being used to measure these types of investments in order to determine the appropriateness of the metric to this domain.

Robert Kaplan (1984) provides a brief history of the development of the ROI metric in his paper, *The Evolution of Management Accounting*. Around the early 1900s the DuPont Company needed a financial metric that would indicate the rate of return of their invested physical capital. The ROI metric was developed to serve two main functions (Kaplan, 1984):

1. To evaluate the financial performance of the company as a whole
2. As an indicator of the performance efficiency of each of its departments/operating units

To create the ROI formula, F. Donaldson Brown (an electrical engineer with no formal accountancy training, who later became DuPont's chief financial officer) combined two accounting performance measures: sales turnover ratio (sales/total investment) x operating ratio (net earnings/sales) (Johnson and Kaplan, 1987). Therefore, ***ROI = Net Earnings/Total Investment***.

According to Dearden (1969), by the late 1960s there was widespread use, and often misuse, of the ROI metric as a management control device to evaluate the profit performance of division managers. He noted that while ROI was only one of DuPont's management control mechanisms, many companies had adopted it as their only control mechanism and ignored the other elements of control DuPont effectively used (Dearden, 1969). In their review of the ROI metric, Johnson and Kaplan (1987, p. 11) deemed it to be "the most important and the most enduring management accounting innovation". To this day, the ROI metric has been mainly used in management accounting to calculate the return on investment in physical capital (i.e. plant and equipment).

More recently, and possibly as a consequence of financialisation, there have been exhortations and sporadic attempts to apply the ROI metric to different types of investments. Examples of applications

of the metric to other domains include the ROI of Marketing (Rust et al., 2004), ROI of Social Media Marketing (Fisher, 2009), and ROI for evaluating Information Systems (Botchkarev and Andru, 2011). However, of particular relevance to this study are approaches using the ROI metric to evaluate human capital investments, such as the ROI of Human Resource Development (Wang et al., 2002), Rae's Training cycle, roles and activities (Pye and Hattam, 2008; Rae, 2002), Human Capital Return on Investment (HC ROI) (DiBernardino, 2011), ROI of International Assignments (Steen and Welch, 2011), and the Return on Invested Talent (ROIT) metric (Hesketh et al., 2014).

Of these, none appear to have been as widely implemented in the UK as the Phillips' ROI Methodology™ and the Social Return on Investment (SROI) approach, or even the abdi ROI recommended approach (an adaptation of Phillips' ROI Methodology™). Arguably, these three approaches have attracted interest because they appear to offer a solution to a problem: how to (quantitatively) demonstrate the returns for spending on human capital initiatives. These approaches seem to be increasingly popular in the UK, as can be seen by the recurrent courses continually on offer by the three organisations behind them: Impact Measurement UK Ltd (Phillips) (Impact Measurement (UK) Ltd., 2015), NEF/Social Value UK (SROI) (Social Value UK, 2015) and abdi Ltd (abdi) (abdi Ltd, 2015). At a minimum, the interest is sufficient to sustain three niche consultancies offering regular courses and support.

A timeline of events shows that the Phillips' ROI Methodology™ was the first ROI approach developed in the early 1970s, subsequently gaining prominence among training practitioners in the USA and further afield (ROI Institute, 2010) but particularly in the private sector. It is reported that more than 5,000 organisations have implemented the methodology globally, which began in manufacturing and later expanded to service, healthcare, non-profits, government and educational systems (Phillips, 2003; ROI Institute, 2010). Their efforts have targeted human capital within organisations (employees).

Also in the USA, but in the late 1990s, the Roberts Enterprise Development Fund (REDF) pioneered the Social Return on Investment (SROI) approach for the non-profit (or third) sector (Emerson et al., 2000; Gair, 2002; Hall, 2014; Tuan, 2008). In 2003, the UK's New Economics Foundation (NEF) conducted a SROI pilot project and in the following two years worked with REDF in a SROI Working Circle to write the first SROI Framework guideline (Olsen and Nicholls, 2005). Subsequently, NEF

set up the UK's SROI Network in 2008 (now Social Value UK). The SROI Network, along with NEF, continues to develop the SROI approach, updating versions of the guidelines in 2009 and 2012 (Millar and Hall, 2013; Nicholls et al., 2012). SROI began in not-for-profit, voluntary, government, non-government and development organisations, which aim to improve the lives of target communities.

While NEF was spearheading the application of the SROI approach in the UK, abdi Ltd had begun deploying the Phillips' ROI Methodology™ in the UK (in 2005), initially applying it to evaluating training programmes. However, this soon changed as the directors, who had been evaluating other types of interventions since the early 1990s, began applying it to other applications – programme improvement and social change. Other adjustments were made to Phillips' methodology; eventually leading to the creation of the abdi ROI recommended approach in 2012. This approach focuses on human capitals within organisations as well as in target communities/countries.

These three approaches are working towards a similar goal, i.e. to demonstrate the returns for spending money on the people (human capital) within organisations and communities. They are also being applied in more than one sector (private, public and non-profit), which may affect their transferability and appropriateness.

'Return', in particular, is problematic especially when the term is used in the public and non-profit sectors/contexts. As will be shown later, ROI has been interpreted as more than a financial metric; it is also a metaphor for the benefit(s) derived from an investment (employing the online Oxford Dictionary's definition of metaphor – "a thing regarded as representative or symbolic of something else"). Organisations in the private and public sectors/contexts invest in their human capital through initiatives such as training courses or process improvement initiatives. The returns of these investments can be accredited to the organisation, e.g. as improved profits or reduction in operational costs. However, for non-profits such as those in international development, investments in human capital (e.g. beneficiaries embarking on improving their employability skills in a community) provide returns for the community/country, e.g. reduction in welfare benefits paid out. Arguably, the returns for investing in human capital in the public sector/context also benefit the community, e.g. increased likelihood of acquiring a job, although this may difficult to monetise.

The ‘recipients’ of the returns on the human capital investment (i.e. organisations and communities/countries) shall be called ‘service systems’ in this study. Therefore, the returns on the investment in the different sectors/contexts benefit different service systems, as depicted in Table 1: Whose Investment/Who Benefits?

Table 1: Whose Investment/Who Benefits?

	Private	Public	Non-profit
Investor	Organisation	Organisation	Organisation
Returns on Investment	Organisation	Organisation (Community)	Community

1.3 Three Approaches for Measuring ROI of Human Capital Investments

Overviews of the three key ROI approaches in the UK are presented in this section in the order they were developed: Phillips’ ROI Methodology™, SROI approach and abdi ROI recommended approach. This is followed by a comparison of these approaches. The three approaches provide clear processes and procedures for using the ROI metric to evaluate human capital investments.

1.3.1 The Phillips’ ROI Methodology™

The Phillips’ ROI Methodology™ grew out of the Kirkpatrick Learning Evaluation Model and is most easily explained by reference to that model.

Donald Kirkpatrick began developing his four-level model for evaluating learning in his doctoral thesis in 1954, although at the time he did not classify the techniques he suggested as levels or a model (Kirkpatrick, 1996; Kirkpatrick, 2009; Kirkpatrick, 2007). It was after he wrote four articles on techniques for evaluating training programmes for Training & Development, the journal for the American Society of Training Directors, that the terms ‘level’ and ‘model’ soon became associated

with it (Kirkpatrick, 1996; Kirkpatrick, 2009; Kirkpatrick, 2007). The four levels are guidelines for evaluating training programmes (Kirkpatrick, 1996; Kirkpatrick and Kirkpatrick, 2007):

Level 1 – Reaction: participants are measured on their satisfaction with the training programme (e.g. topic, speaker, and schedule) to assess their motivation and interest in learning.

Level 2 – Learning: In his original article, Kirkpatrick defined learning as the principles, facts and techniques absorbed by the trainees but later refined this level as the “measure of the knowledge acquired, skills improved or attitudes changed due to training” (Kirkpatrick, 1996, p. 56).

Level 3 – Behaviour: commonly referred to as transfer of training, this is where trainees are measured at some time after the training to determine if there were any changes on the job.

Level 4 – Results: the final results that occur due to training are measured. The cost of evaluation should be considered in relation to the potential benefits.

Within this approach, there is an assumption that training contributes to the organisation’s results and therefore, no specific approaches for isolating other contributing factors is included (Kirkpatrick and Kirkpatrick, 2007). Kirkpatrick believes in a business partnership model, i.e. a partnership between L&D practitioners, business leaders and their needs (Kirkpatrick and Kirkpatrick, 2007). This suggests that if there is a change in business results, the intervention/initiative was part of the reason (Kirkpatrick and Kirkpatrick, 2007). Nevertheless, when feasible, control groups should be used where before and after data are collected at levels 2 to 4 (Kirkpatrick, 1996; Kirkpatrick and Kirkpatrick, 2007). Each level must be evaluated chronologically in order to provide a “chain of evidence” because “...an end result is the product of a series of things done over time and not just one factor” (Kirkpatrick, 2009, p. 58). Kirkpatrick’s model was developed for use in evaluating learning and development initiatives and has since been adapted and refined by others. (See Tamkin et al. (2002) for an overview of some of these approaches.)

The Phillips’ ROI Methodology™ is an adaptation of Kirkpatrick’s model. In the early 1970s, Jack Phillips developed this methodology and completed his first impact study in 1973 (ROI Institute, 2010). He added a fifth level (ROI), incorporated isolation techniques (control groups, trend line

analysis, forecasting and estimations) and provided 12 guidelines for evaluation (Phillips, 2003). Since its first application in 1973, the model has been refined and is reportedly widely used in evaluating human capital initiatives within organisations (Phillips and Phillips, 2009; ROI Institute, 2010). Initially, the methodology was applied in the corporate context (first manufacturing and then services). However, it has subsequently been applied in other contexts (mainly in the US), such as education, public services and health service (Phillips, 2003; Phillips, 2005). The ROI Institute (2010) lists 21 applications of the methodology, including training and development, change management, IT/systems, quality/six sigma/lean engineering and project management solutions.

The addition of a fifth level to Kirkpatrick's model has drawn criticism, most notably from Donald Kirkpatrick who did not believe there was a level 5 but accepted that this was Jack Phillips' way of approaching training evaluation (Kirkpatrick, 2007). Ford (2004) argues that Phillips' "ROI model is the single most important summative evaluation method available" but it is "not practical for many training interventions" as well as non-training interventions related to human performance (Ford, 2004, p. 39). He notes that since it is summative it can take long to ascertain if the initiative is working, which may be too late to help decision-makers (Ford, 2004). In addition, he adds that "ROI is not the elusive Holy Grail" of evaluation (Ford, 2004, p. 39), however, it is unclear here whether 'ROI' is referring to the general approach or specifically the metric (more on the ROI taxonomy in section 1.4). Nonetheless, the process of Phillips' ROI Methodology, the 12 guiding principles, tabulation of fully loaded costs, isolation techniques and taxonomy of outcomes are what really separate it from Kirkpatrick's model. The five levels are (Phillips, 2003; Phillips and Phillips, 2007):

Level 1 – Reaction, Satisfaction & Planned Actions: measurement of the learners' reaction to and satisfaction with the initiative (the medium, content and value), as well as their specific plans for implementation. This is an extension of Kirkpatrick's level 1 definition.

Level 2 – Learning: the measurement of the learners' understanding from the initiative, i.e. information, knowledge, skills, attitude and contacts.

Level 3 – Application & Implementation: the measurement of the use of the information, knowledge, skills and contacts on the job.

Level 4 – Business Impact: the measurement of changes in the organisation's impact indicators, e.g. output, quality, time, costs and customer satisfaction, which are linked to the initiative.

Level 5 – ROI: a comparison of the monetary benefits of the organisation's impact against the costs of the project, expressed as a percentage.

To these five levels can be added Level 0, the measurement of the inputs to the initiative, e.g. the audience numbers, hours and costs of the initiative – the initial level of activity (Phillips and Phillips, 2007). Intangible benefits, i.e. benefits that are not converted to money, are also captured but are classified as “a sixth type of data—not a sixth level” (Phillips and Phillips, 2007, p. 13). The formula used is: **ROI** = ((Realised Monetary Benefits – Actual Costs)/Actual Costs) x 100.

1.3.2 The Social Return on Investment (SROI) Approach

REDF initially developed the SROI approach using discounted cash flow analysis but that was later modified to calculate the impact of initiatives (Emerson and Twersky, 1996; Emerson et al., 2000). Since then, there has been continued development of the approach particularly through NEF, since REDF made the approach “open source” (Javits, 2008, p. 2). The latest version of ‘A Guide to SROI’, published in January 2012 (Nicholls et al., 2012), is discussed here.

The UK government, through various departments, have supported SROI implementation in the UK's third sector, e.g. through the previous ‘Office of the Third Sector’ that was based in the Cabinet Office (Nicholls et al., 2012). The Department of Health also encouraged the use of the SROI approach and even established the Social Enterprise Investment Fund (SEIF) in 2007 to support entry of social enterprises into the NHS market (Millar and Hall, 2013). In addition, the Social Value Act, which became live on the 1st of February 2013, could be taken as evidence that the UK government is emphasising the importance of social value (Cabinet Office, 2013). This suggests that approaches like SROI will be in more demand.

According to the SROI guidelines, “‘Social value’ is used to describe social, economic and environmental value” (Nicholls et al., 2012, p. 14). SROI is a framework for understanding, managing,

measuring and accounting for social, environmental and economic outcomes (Millar and Hall, 2013) by telling the story of how the change is created, and using monetary values to represent these changes, leading to the SROI ratio (Nicholls et al., 2012). It measures the value of social benefits in relation to the relative cost of achieving those benefits (Emerson and Twersky, 1996; Millar and Hall, 2013). It appears 'value' is used to mean 'worth' and 'importance', interchangeably, throughout the guideline and is taken from the perspective of the stakeholders affected by the initiative (Nicholls et al., 2012).

There are two types of SROI (Nicholls et al., 2012):

1. Forecast – an estimate of the social value to be created as a result of the outcomes of the initiative, which is useful during the planning of an initiative
2. Evaluative – a retrospective calculation of the actual value of the outcomes of the initiative

Although this approach looks at economic analysis (Ryan and Lyne, 2008), it was developed from social accounting and cost-benefit analysis (CBA) (Gair, 2002) and also draws on the theory of change and the logic model (Nicholls et al., 2012). Arvidson et al. (2010) argue that there is not much difference between the classic CBA and the SROI, specifically in regards to the ratio of benefit over cost. SROI focuses on the outcomes of an initiative, as identified by its stakeholders – it is by evidencing these outcomes that measurable indicators of success can be achieved (Nicholls et al., 2012).

A key feature of this approach is the engagement of stakeholders, which is the first of seven principles that guide the application of this approach (Millar and Hall, 2013; Nicholls et al., 2012):

1. Involve stakeholders
2. Understand what changes
3. Value the things that matter
4. Only include what is material
5. Do not over-claim

6. Be transparent

7. Verify the result

In the SROI approach, impact means “outcomes after taking into account what would have happened anyway, the contribution of others and the length of time the outcomes last” (Nicholls et al., 2012, p. 14). There are six stages to the SROI process (Nicholls et al., 2012):

1. Establishing scope and identifying key stakeholders.
2. Mapping outcomes – impact map or theory of change, showing the relationship between inputs, outputs and outcomes.
3. Evidencing outcomes and giving them a value – finding data demonstrating the outcomes and then determining a value for these outcomes.
4. Establishing impact – isolating factors that have contributed to the outcomes (deducting deadweight, displacement, and attribution as well as calculating drop-off).
5. Calculating the SROI ratio: **SROI** = Present Value (PV)/Value of Inputs (or net **SROI** = Net Present Value (NPV)/Value of Inputs). E.g. a ratio of 3:1 means a £1 investment returned £3 in social value. Present Value is the current value of a future sum of money, reduced by a discount rate. In SROI, value does not represent financial value; instead it should be viewed as expressing the “currency of social value” (Arvidson et al., 2010, p. 6).
- 6). Financial proxies are used to estimate the social value of non-traded, non-market goods (Nicholls et al., 2012).
6. Reporting, using and embedding – communicate with stakeholders, embed good outcomes processes and verify report (assurance).

A seemingly attractive feature of this approach is the calculation of the ratio, SROI, because at first glance this appears to be a useful tool to help funders and commissioners compare initiatives and/or organisations (Arvidson et al., 2010). However, this is discouraged since each SROI evaluation is developed based on the needs of its particular stakeholders and therefore comparing across

initiatives would likely be unhelpful (Nicholls et al., 2012; Ryan and Lyne, 2008). Instead, the ratio can be used to compare changes that occur over time for that initiative within the organisation (Nicholls et al., 2012). Ryan and Lyne (2008) identified three main areas that would benefit from consistent and realistic application of the SROI framework across evaluations – the life of the project, discount rate, and the treatment of inflation. In addition, more work is needed on the calculation of social cost savings, deadweight and attribution assumptions. The current guide addressed these areas, with the recognition that there is still further work to be done (Nicholls et al., 2012).

More recently, there has been a shift from focusing on technique to focusing on the principles of the SROI approach, which it is said offer a credible way of better and rounded measurement through stakeholder engagement (Nicholls et al., 2015). This shift acknowledges that using the SROI approach did not show improved quality or quantity of capital flows to social projects (Nicholls et al., 2015).

1.3.3 The abdi ROI recommended approach

The abdi ROI recommended approach is an extension of the Phillips' ROI Methodology™. It "has been built on the experience of hundreds of individuals learning to monitor and evaluate a wide variety of projects and programmes" (abdi Ltd, 2013, p. 20). These projects and programmes can be found across different sectors/contexts, such as corporate, health service and international development. Consequently, various adaptations and changes have occurred to facilitate application seemingly in response to challenges faced by practitioners. These have been "grounded" (abdi Ltd, 2013, p. 20) in a number of management models and tools, namely the logic model, project management, business process modelling, benefits realisation, change management, scenario planning, theory of change, root cause analysis, time-driven activity-based costing, Porter's Five Forces Analysis, Boston Matrix, SWOT analysis, Ansoff Matrix and PESTLE (Political, Economic, Social, Technological, Legal or Environmental Analysis) (abdi Ltd, 2012; Massy and Harrison, 2014).

For example, ideas from planning tools such as theory of change, stakeholder engagement and business process mapping have been incorporated to facilitate a more disciplined planning stage (abdi Ltd, 2012). This is a clear distinction from Phillips' methodology, which might have occurred in

response to a need (i.e. lack of proper planning skills) observed in practitioners attending workshops to learn the approach. In addition, there is heavy emphasis on stakeholder engagement, intentions and accountability throughout the planning, implementation and evaluation of the initiative (abdi Ltd, 2012; Massy and Harrison, 2014). This engagement takes place at 1) the level 1 stage, where the participants in the initiative are the targets and 2) project management stage, where other stakeholders from inside and outside of the organisation are sought out to plan, implement and evaluate the initiative (Massy and Harrison, 2014).

The six levels of outcomes are (abdi Ltd, 2012):

Level 1 (L1) – Engagement: measurement of the engagement of the learners and captures their planned actions at this level.

Level 2 (L2) – Learning and Confidence: measurement of the learners' skills, knowledge and attitudes, as well as confidence to apply the approach.

Level 3 (L3) – Application and Implementation: on the job measurement of the learners' changes in performance, behaviour, practice and processes.

Level 4 (L4) – Impact Outcomes: measurement of changes in the targeted impact outcomes.

Level 5 (L5) – ROI: compares the benefits of the initiative to its costs, as a percentage.

Level 6 (L6) – Non-monetised impact outcomes: (or intangibles) the measurement of outcomes that have not been converted to monetary values.

The formula used is: **ROI** = ((Realised Monetary Benefits – Actual Costs)/Actual Costs) x 100.

The abdi approach integrates the planning, implementation and evaluation of the initiative into a 6-step process, shown below (abdi Ltd, 2012).

1. Set baselines and confirm justification.

2. Plan investment, needs and objectives and measurement approaches. Clear needs and measurable objectives should be established when project or activity is planned.
3. Plan measurement. A measurement plan should be completed and shared before the project or activity begins.
4. Track results and report to improve.
5. Analyse data, attributing to impact outcomes. Data collected and reported to drive improvement.
6. Report on impact. Final reporting to all stakeholders.

This process is similar to Phillips' ROI Methodology™, which includes planning, data collection, data analysis and reporting (Phillips, 2003).

Data is systematically gathered to create a 'chain of impact', while isolating for other factors that could influence the impact outcomes. The 'chain of impact' shows the link between each level of outcome to provide credible evidence of the impact of the initiative. This is because "there is no way to show a direct causal link between a project or programme and the achievement of impact outcome objectives" (abdi Ltd, 2012, p. 18). Although debates around the provision of evidence of a direct link between HRM practices and organisational performance still occur (Fleetwood and Hesketh, 2006; Guest, 1997; Subramony, 2009), abdi accepts there is a link and uses the 'chain of impact' to demonstrate that the human capital initiative has contributed to the organisation's performance (abdi Ltd, 2012; Bassi and McMurrer, 2008; Fitz-Enz, 2012). This idea of a 'chain of impact' is from the Phillips' ROI Methodology™ and is similar to Kirkpatrick's 'chain of evidence'. They advocate demonstrating a 'chain of impact' by establishing clear SMART (Specific, Measurable, Attainable, Realistic and Timely) objectives at each level and then collecting measurement data on these objectives that provide credible evidence there is a link between the levels. The process begins at needs assessment and objective setting from level 4 (L4) to level 1 (L1), then data collection and analysis from L1 to L5 (see Figure 1: The V diagram) (abdi Ltd, 2012)¹.

¹ Here, and throughout this thesis, the colours in the figures/diagrams have only been used to differentiate the elements in the particular figure/diagram. There are no meanings deliberately attached to the use of selected colours.

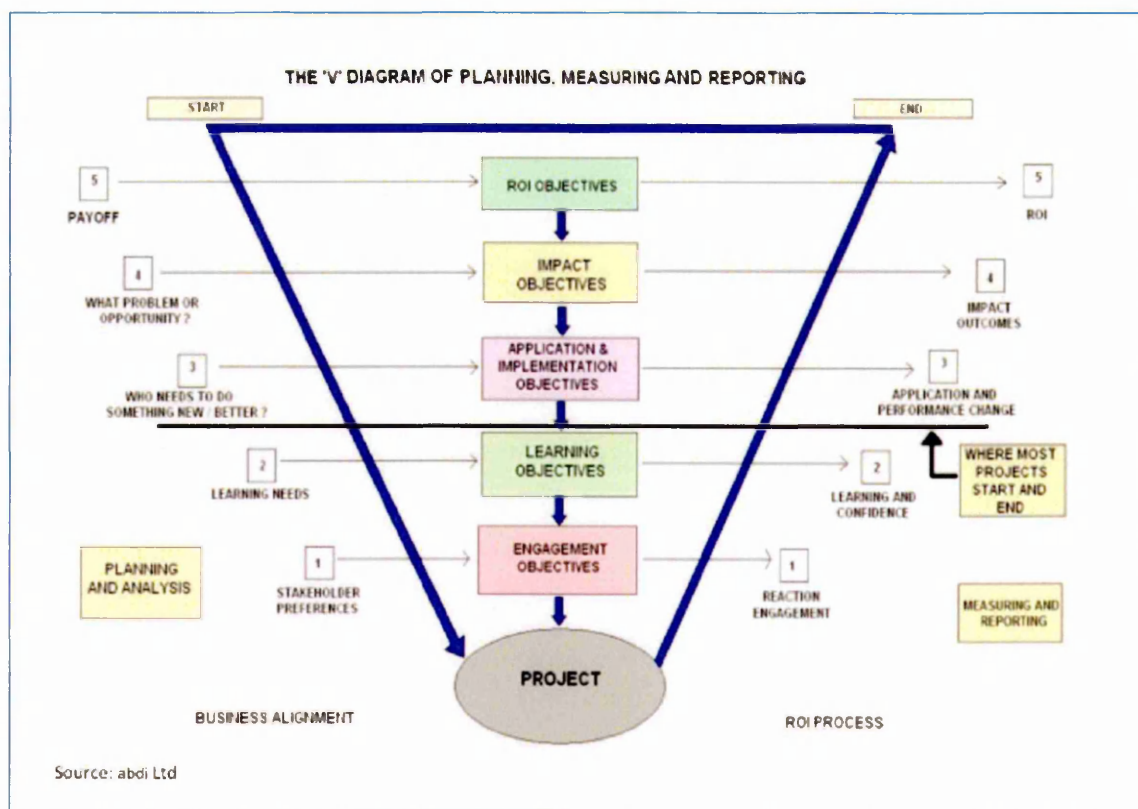


Figure 1: The V diagram

Clients and learners are advised that not all projects need to be evaluated to L5 (as with Phillips) and L6. Once data has been collected from L1 to L5, ROI is calculated using realised monetary benefits and actual fully loaded costs. A key feature of this approach is being able to attribute the results to the human capital initiative by isolating the impact of the initiative between L3 and L4, using one or more techniques – control groups, regression analysis, trend line analysis, forecasting and estimation. The process systematically tracks what happens to participants during a project and identifies the factor(s) that changed behaviour. Templates are provided to guide the learners during this process (see Appendix 2 – Assessment Templates).

Reporting during implementation to drive improvement as well as a final report based on the chain of impact is recommended. The approach is meant to capture the entire change journey and allows the practitioner to closely examine what contributed to different levels of outcomes (Massy and Harrison, 2014).

Practitioners learn the abdi ROI recommended approach by attending abdi's Foundation and Evaluator workshops, which lead to UK accredited certificates, (QCF 5 and 6, respectively). The Foundation workshop (the focus of this thesis) is a 2-day event. It covers an overview of the approach and includes the principles, processes and tools to plan, monitor and evaluate a human capital initiative (see Appendix 5). To attain their certificate, participants are expected to submit completed templates of a live project for assessment (see Appendix 2). The 3-day Evaluators' workshop goes more in depth on certain aspects of the approach such as data collection, action planning, isolation and implementation. Both of these workshops are usually held for a general audience. However, some organisations opt for internal workshops when a number of their practitioners indicate interest in completing the course(s) or where it is a required training course for evaluation or impact measurement. Tailored workshops with bespoke workbooks have been created for the health service and international development sectors/contexts.

Apart from the UK, applications of the abdi ROI recommended approach have been reported in countries such as Finland, Germany, Singapore, India, Egypt, Bahrain, Uganda and Botswana in the private, public and not-for-profit sectors (abdi Ltd, 2013).

There has been much criticism of the use of "levels" since Kirkpatrick first published his model in 1954 (see Tamkin, et al (2002) for a good review). L1 to L3 depict the engagement, learning and confidence, as well as behaviour/application/implementation levels, respectively. While L4 depicts the impact/results/performance of the organisation, L5 depicts the calculation of ROI and in abdi's approach L6 depicts non-monetised/intangible benefits. These levels suggest that each preceding level must be accomplished before a higher level can be attained (abdi L6 occurs after L4 – see Figure 2). There is also the suggestion of a causal link between these levels (Alliger and Janak, 1989; Tamkin et al., 2002).

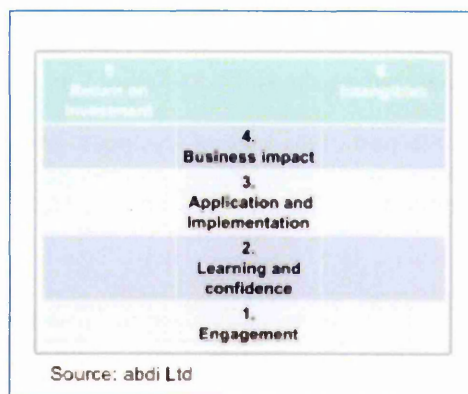


Figure 2: ROI Levels

However, upon closer examination, the three levels interrelate – engagement (L1), learning and confidence (L2) and application and implementation (L3) (see Data Analysis part 1 template on page 273, workbook (2012) and abdi's book by Massy and Harrison (2014)). At L1, five questions are asked: four covers attitude/motivation (importance of the intervention to the person and organisation, as well as willingness to recommend the intervention to others and intentions to apply what was learnt) and one covers what was learnt (new knowledge gained from the intervention). This last question would be more aptly placed at L2. At L2, objectives are to be set for what is to be learnt ('know what') and how the knowledge is to be applied ('know how'/skills), as well as trying to ascertain the attitude and confidence to apply the new knowledge. This final objective is really a L1 (attitude and confidence) objective. Indeed, at L2 the objectives for 'know how'/skills are to ensure the learners have the knowledge to apply the skills.

At L3, the focus will be on whether or not they apply it to the standards set. This demonstrates the difficulty of categorising human attributes into separate levels. However, unless there is a baseline for the behaviour(s) that require changing, how could the initiative be credibly accepted as the cause of the change in behaviour? Even if the isolation techniques are robustly carried out, did the participants of the initiative already have the skills to behave in particular ways?

At L5 and L6, use of the term 'levels' can also cause confusion for practitioners. L5 is depicted as an outcome level following L4. However, the ROI metric is being used to *evaluate the returns of the investment* and does not fit in with the hierarchy of levels of the outcomes and impact of an initiative. In addition, the V diagram (Figure 1) depicts the starting point at L5, when in reality the starting point is L4. L4 is where the service system's needs or opportunities and objectives are established and

then outcomes measured against these (as taught in the ROI courses). Treating 'non-monetised benefits' as L6 can also be unclear, especially since it is taught as following L4 (see Figure 2: ROI Levels). Non-monetised benefits are part of the service system's performance (L4), i.e. the initiative can impact both monetised and non-monetised performance results.

1.3.4 A Comparison of the Three ROI Approaches

A key difference between Phillips and abdi's ROI approaches on the one hand and the SROI approach on the other is that they are being guided by different principles. In Phillips and abdi's cases, their approaches to calculating ROI are based on historical financial data. They only account for actual costs and realised monetised benefits and therefore capture the actual cost and monetised benefit data for the prior 12-months. This version of ROI is similar to the DuPont ROI (Net Earnings/Total Investments). Evaluative SROI also use actual data along with estimates of future benefits, while forecast SROI approach uses estimates of future costs and benefits of the social value that may be achievable at some point in the future. However, both types of SROI use discounted cash flow methods in the form of present value (and net present value). Financial proxy variables are employed to estimate the value of a perceived future benefit and the time period is based on the number of years the benefit is expected to last after the initiative is completed. The difference can be seen in the formulas used:

The Phillips ROI Methodology and abdi ROI recommended approach:

$$\text{ROI} = ((\text{Realised Monetary Benefits} - \text{Actual Costs}) / \text{Actual Costs}) \times 100$$

(or Net Realised Monetary Benefits/Actual Costs)

SROI approach:

$$\text{SROI} = \text{PV/Value of Inputs (or net SROI} = \text{NPV/Value of Inputs)}$$

Fundamentally, they are also calculating different things. Users of the SROI approach measure the social, environmental and economic outcomes brought about by the initiatives they evaluate. They apply monetary/financial values to convey the impact of those initiatives. They are actually measuring the benefits associated with the changes that have occurred (or will occur) in the service system.

These changes occur through a process: input-activity-output-outcome. For Phillips and abdi, users are measuring the impact of a human capital initiative on a service system's performance as a result of the changes that occurred in the participants' competences (i.e. the changes to their knowledge, skills and attitude). That is, they measure how investments to change people's performance (i.e. to increase their competences) affected the service system's performance. Essentially, these three approaches are measuring: 1) the results/outcomes of the human capital initiative, i.e. what has changed in the service system performance as a result of changes in the process or people; and 2) the ROI of the investment in the human capital, i.e. the returns consequent on these changes in process and people performance.

These three approaches fall within the discussions that move away from the positivistic school of philosophy. However, while SROI and abdi both fall within the social constructivist's paradigm with their inclusion of stakeholders during the planning and execution of the evaluation, like Realist Evaluation, Phillips' methodology targets stakeholders only as sources of data. Principles shared by the three approaches include continuous reporting of data to improve performance while the initiative is being implemented, and conservatism, which means reporting benefits as conservatively as possible. Both the Phillips ROI Methodology™ and the abdi ROI recommended approach systematically aggregate data from the individual to group level, use isolation techniques as well as fully loaded cost (i.e. direct and indirect costs) in their approaches. Collecting fully loaded cost can be difficult to practically implement in some settings, e.g. social change initiatives in international development. So too is the ability to monetise benefits derived from the initiative. As such, SROI recommends using appropriate proxies but Phillips' and abdi's approaches do not. In fact, abdi's rule 6 insist that their evaluators "never, ever use proxy data for money values" since this can affect the credibility of their evaluation (Massy and Harrison, 2014, p. 217). In any case, proxy data would be more suited to a predictive formula, as used in the SROI approach. Phillips and abdi's approaches use a retrospective formula.

One of the distinctive features of the abdi ROI recommended approach is its incorporation of project management tools. As such, the approach is more of a planning and evaluation approach, rather than just an evaluation approach. It can be considered a consilience of approaches (Steel and König, 2006) because it includes key elements from a number of approaches including SROI and Phillips' approaches, e.g. stakeholder engagement and hierarchy of levels, respectively.

Other distinctions between abdi's and Phillips' approaches are further refinement of the levels (defined as the taxonomy of outcomes), such as focusing on the participant's engagement at level 1 and not their satisfaction and at level 4, only three outcomes classified as 'soft' are used: internal climate, external climate and innovation, as well as adding a sixth level by classifying intangibles (non-monetised benefits) as a level and the incorporation of a new isolation technique, regression analysis (abdi Ltd, 2012). There is also a caution "against the risks associated with the Phillips forecasting approach, and the proxy values used in some other approaches" (abdi Ltd, 2012, p. 22).

The SROI approach is used predominantly in the third sector but has also been deployed in the public (Millar and Hall, 2013) and private (CIPD, 2014b) sectors, while Phillips' ROI Methodology is applied mainly in the private and public sectors (ROI Institute, 2010). The abdi ROI recommended approach is being implemented in all three sectors – private, public and third sectors (abdi Ltd, 2011).

A summary of the differences in these approaches can be seen in Table 2.

Table 2: Comparison of the Three ROI Approaches

	Phillips	SROI	abdi
Measurement Focus	People (individual to group)	Process (input-activity-output-outcomes)	People (individual to group)
Primary Uses	Evaluative	Evaluative (E) Forecast (F)	Evaluative
Data	Actual (Historical & Fully-loaded) Narrative for non-financials	Actual (Historical) (E) Estimates & Proxies (F)	Actual (Historical & Fully-loaded) Narrative for non-financials
Calculation	$ROI = \frac{\text{Realised Monetary Benefits} - \text{Actual Costs}}{\text{Actual Costs}} \times 100$ Isolation techniques (control groups, trend line analysis, forecasting & estimation)	$SROI = \frac{PV(\text{Value of Inputs})}{\text{Value of Inputs}}$	$ROI = \frac{\text{Realised Monetary Benefits} - \text{Actual Costs}}{\text{Actual Costs}} \times 100$ Isolation techniques (control groups, regression analysis, trend line analysis, forecasting & estimation)
Stakeholder Engagement	Sources of data	Sources of data Participant in planning, implementation & evaluation	Sources of data Participant in planning, implementation & evaluation

1.4 Existing Research on using the ROI Metric for Human Capital Investments

To present a systematic view of ROI, Botchkarev and Andru (2011) identified key attributes and types of ROI and developed a ROI taxonomy: traditional, extensions, virtualisations, and imitations (see Table 3: Botchkarev and Andru's ROI Taxonomy). In this taxonomy, traditional ROI uses retrospective accounting records for actual costs and financial returns (very similar to the original DuPont ROI), extension ROI (similar formula to traditional ROI but uses estimates of future values, discount rate and a time period), virtualisation ROI includes intangible costs and financial returns for extension ROI (similar to the SROI approach), and imitations has been categorised as, on the one hand, those who use the term 'ROI' while not actually making a ROI analysis and, on the other hand, those who do not use the ROI term but actually employ some ROI measurement (Botchkarev and Andru, 2011).

The ROI taxonomy, as proposed, does not include approaches that employ traditional ROI and include intangibles, as is the case with Phillips and abdi's approaches. Nevertheless, although Botchkarev and Andru's (2011) study was specific for information systems, the ROI taxonomy is useful because it highlights that there are different approaches to measuring and using ROI, regardless of the domain. In addition, it shows that the term ROI has different interpretations and uses.

Table 3: Botchkarev and Andru's ROI Taxonomy

	Traditional ROI	ROI Extensions	ROI Virtualizations	ROI Limitations
What is it?	$ROI[T] = \frac{\sum_i FinRet(i) - \sum_j Cost(j)}{\sum_j Cost(j)} \times 100\%$ <p><i>FinRet</i> – Financial Return</p>	$ROI[E] = 3\{ROI[T]_{est}, t, Risk\}$	$ROI[V] = \Psi\{ROI[E], \$B\}$	<p>Subcategory 1. Use the ROI term for the measures which have little or nothing to do with ROI. The purpose is to cash in on the seemingly positive credibility of the ROI term.</p> <p>Typical for this group of measures is understanding of the ROI as “any benefit”.</p> <p>Subcategory 2. Paradoxically enough, this group attempts NOT to use the ROI term (at least in the titles). They actually use ROI method (or very similar) under different names claiming that they’ve overcome the ROI deficiencies/ limitations (e.g. their measures are multi-dimensional).</p> <p>Can be based on ANY Return / Benefit / Impact.</p> <p>Retrospective and Predictive.</p>
How it is measured?	Profitability based on “hard” dollars.	Profitability based on dollar estimates.	Profitability based on a mix of “hard” dollars, dollar estimates and “dollarized” assessments of intangibles.	
What is the time frame?	Retrospective.	Retrospective and Predictive.	Retrospective and Predictive.	
What is the level of accuracy?	As precise as accounting records are.	Uncertainty increases due to estimation errors.	Indeterminate. Open to subjective perceptions and interpretations.	
Accountability and transparency?	Accounting records (official financial documents or accounting systems) are used as sources of cost and return data. Full transparency and accountability.	Certain level of accountability may be preserved, if cost and return estimates are included in the planning financial documents and periodically reviewed. Limited transparency due to the subjectivity of predictions.	Data used in calculations (especially Returns) is not recorded in the official accounting systems. Prone to uncontrolled subjectivity.	

Research on how the ROI metric is applied in practice for human capital investments is very limited (McNulty and Tharenou, 2004; Steen and Welch, 2011). Wang et al (2002) proposed the ROI of Human Resource Development where an economic definition is used instead of an accounting definition for the term ROI in the HRD field. They suggest that the ROI for HRD programmes is “any economic returns, monetary or non-monetary, that are accrued through investing in HRD interventions” (Wang et al., 2002, p. 212). They use a systems framework that depends on data from the organisation’s database, and are therefore objectively acquired (Wang et al., 2002). This approach requires that HRD practitioners have skills in systems thinking and quantitative analysis, and may be inadequate for single programme interventions. Although the researchers presented two application scenarios in their paper, it is unclear whether the proposed approach was applied in practice as no examples could be found.

Rae’s Training cycle, roles and activities (Pye and Hattam, 2008; Rae, 2002) is specifically geared towards evaluating training programmes. It involves a 16-step evaluation framework that includes pre-course assessments, setting training objectives, interim validation, medium and long-term review of learning implementation and calculating the ROI. In this approach, the line manager assesses the learner’s value to the business in quantitative terms before attending the training. This would then be used as a baseline on which to calculate the ROI, when the learner’s business value is assessed

after the training. This would be very subjective and difficult to compare across learners within a team, and especially across teams. This is a practitioner-based approach that was developed by W. Leslie Rae, a management and training consultant who has published many articles and books in this field. However, no independent studies of how this framework is applied in practice could be found.

DiBernardino's (2011) Human Capital Return on Investment (HC ROI) uses the patented formula: $HC\ ROI = (\text{Profit} - \text{Financial Capital Costs}) \div \text{Human Capital Costs}$, where profit is expressed as EBITDA (earnings before interest, taxes, depreciation, and amortization). By combing through the accounting system to identify all line items that represent human capital costs human capital investment is isolated. That is, all employee costs, costs in support of employees as well as costs in lieu of employees is identified and isolated (DiBernardino, 2011). Financial Capital Costs is the sum of interest, depreciation, amortization and cost of equity (DiBernardino, 2011). Since this approach uses aggregated costs and revenues of the organisation, it does not address issues relating to the ROI of human capital investments for specific initiatives.

The Return on Invested Talent (ROIT) metric (Hesketh et al., 2014) is a recent contribution to the ROI discussion. This study was carried out in collaboration with Deloitte LLP and aimed to help executives "evaluate the specific contribution of their talent to the performance of their business" (Hesketh et al., 2014, p. 1). The authors present five steps for calculating the gross and net return on invested talent, which draw on the aggregated totals of the organisation's financial reports. However, while this is useful, like HC ROI it does not address the issue of the ROI of investing particular human capital initiatives.

A more relevant study is Steen and Welch's (2011), who posed the question of the ROI metric's applicability to human resources and argues that "the potential of financial metrics such as return on investment" have not been fully investigated (Steen and Welch, 2011, p. 59). In their study on the ROI of international assignments, Steen and Welch found that measuring intangible costs, as well as isolating and measuring the outcome of the initiative are problematic (in their study, intellectual capital was the outcome of the international assignment) (Steen and Welch, 2011). This was an exploratory study that focused on a discrete activity (international assignments) in the corporate context. No ROI approach (or formal process/system to carry out ROI assessments) was being

applied at the participating organisations. Therefore, it is likely that there would have been different steps undertaken to assess the ROI of an international assignment across the participating firms. As such, it is difficult to understand the process and the formula the participants used to measure the ROI of their international assignments.

As indicated earlier, three evaluation approaches that specify a process for using the ROI metric to assess investments in human capital are the SROI approach, Phillips' ROI Methodology™ and the abdi ROI recommended approach. A number of studies have been conducted on the SROI approach. Within the UK these include Hall (2014), Arvidson et al. (2010), Ryan and Lyne (2008), Millar and Hall (2013) and Wilson and Bull (2013). Hall's (2014) study was focused on developing a preliminary sketch of evaluation logics in the third sector. He selected the SROI approach for comparison with other evaluation approaches using their published guidelines but did not examine how the approaches were used in practice to measure human capital investments. Arvidson et al's (2010) study focused on the approach itself, the principles and methodology, and concluded with a call "for qualitative methods of investigation to understand the narratives of change within different types of organisations" (Arvidson et al., 2010, p. 16). However, this was a data-free argument, not based on information regarding how the approach is applied in practice and what happens when this is attempted.

By contrast, Ryan and Lyne's (2008) study drew on seven action research projects carried out by Social Economy Scotland (SES) and NEF, which provided detailed accounts of applications of the SROI approach. However, the aim of this study was to develop from these experiences a robust and recognisable SROI approach that could help social enterprises be more competitive with private sector organisations when tendering for public sector service contracts, while also assisting funders and commissioners to select between competing alternatives (Ryan and Lyne, 2008). The researchers examined the rates of return for the seven enterprises – going against recommendations in the guideline (Nicholls et al., 2012). This highlights one of the issues with the approach, i.e. the temptation to compare the results of different organisations based on these rates is strong. It could be argued that this study could have benefited from an explication of the process of implementing the approach that each enterprise undertook. But an examination of the practitioner's route to learning and applying the SROI approach in practice was not part of this study.

Millar and Hall's (2013) study is particularly relevant because it draws on survey and interview data, collected from organisations funded by the Social Enterprise Investment Fund (SEIF), to examine how measurement tools are understood and utilised by social enterprises in health and social care. The researchers found that 30% (of the 172 respondents) applied the SROI approach (on its own or with an internal measurement tool). Practitioners had a diverse range of interpretations of the approach, and the researchers also identified some of the practical issues faced when applying the approach (Millar and Hall, 2013). Practical issues included the difficulty in quantifying 'soft' outcomes and the significant time and resources required to conduct an evaluation (Millar and Hall, 2013). The interviews from this study focused on the use, strengths and limitations of the SROI approach (Millar and Hall, 2013). Respondents that used the SROI approach "found it a challenging, complex and time consuming process with minimal resulting benefits" (Millar and Hall, 2013, p. 936).

The researchers also highlighted the challenges of transferring methods from different sectors and contexts but focused on the transfer of the SROI approach from the US private sector to the UK public and non-profit contexts, highlighting the different epistemological assumptions (Millar and Hall, 2013). This argument would have been stronger if the focus had been on the use and transfer of the ROI metric to different countries since the SROI approach was developed in the US non-profit context by the US non-profit, REDF. Nevertheless, contextual factors play an important role in the implementation of these types of approaches and are an important part of understanding how the approach (and ultimately the ROI metric) is applied in practice.

While this study examined the application of the SROI approach, it did not explore how the approach was learnt. Therefore, it is unclear which version of the SROI approach practitioners learnt (REDF or NEF's version) or if they just followed the guidelines without coaching and support – a possible reason there were diverse interpretations of the approach. In addition, arguably, the researchers also missed the point that the "qualitative experience and tacit knowledge" (Millar and Hall, 2013, p. 936) that these social enterprises were built on constitute a different type of capital being measured – human capital. This is different to the "business and financial principles underpinning" private sector organisations (Millar and Hall, 2013, p. 936). Therefore, the question should have probably been whether the SROI approach, with its use of the ROI metric, is suitable for this type of measurement.

Wilson and Bull (2013) provide insights on applying SROI in practice in a case study from a local authority. The aim of the project was to demonstrate the social value that could result from the restoration of a wooden canal boat by marginalized individuals (Wilson and Bull, 2013). The result from “quite clearly a flawed, somewhat compromised impact assessment” was a ratio of just under 1:4 (Wilson and Bull, 2013, p. 323). This was sufficient for the project to be granted funding. However, the authors admitted to “a certain amount of manipulating the figures” to generate a “final ratio that looked reasonable and realistic” (Wilson and Bull, 2013, p. 322). This highlights the appeal of financial metrics in the decision-making process even to the point of ignoring the degrees to which subjectivity has been applied (Wilson and Bull, 2013). They reported that participants found the process of engaging and determining proxies “challenging and exhausting, yet a rich learning experience for all those involved” (Wilson and Bull, 2013, p. 323). In addition, they found that applying SROI in practice requires commitment, expertise, time and resources that are largely beyond small organisations (Wilson and Bull, 2013).

Research on the SROI approach have reported some benefits of using it that include providing an opportunity for organisations to demonstrate their effectiveness, enabling commissioners to make more informed decisions, as well as being used as a tool for organisational learning (Millar and Hall, 2013; Ryan and Lyne, 2008; Wilson and Bull, 2013). However, the SROI approach has been criticised because it “has received much attention due to a combination of its ambitious and sometimes controversial approach; it claims to be holistic and comprehensive, and it uses a monetised language, combined with qualitative narratives, to express the different types of value created” (Arvidson et al., 2010, p. 3). Arvidson et al. (2010) and Millar and Hall (2013) highlighted some challenges and limitations:

1. The need for the organisation to have good evidence and monitoring systems.
2. Subjectivity, because individual stakeholders conducting the evaluation are the ones who make judgement and discretion in setting the indicators (as seen in the Wilson and Bull (2013) case study).
3. Focus on impact at the expense of understanding process in some cases.

4. Competing principles and goals, where “focus on collecting data on quantitative measures which presents a risk of affecting what actual activities are being carried out” (Arvidson et al., 2010, p. 10).
5. Quantifying the value of benefits as well as other ‘soft’ outcomes.
6. Valuing inputs, e.g. putting a price on volunteering “...whether, at the margin, volunteering is replacing hours of work or hours of leisure for the individual” (Arvidson et al., 2010, p. 12).
7. Inconsistent data across projects and therefore inability to compare.
8. Challenges to capturing deadweight, displacement and attribution (i.e. understanding the counterfactual).
9. Practical constraints, such as the significant time and resources required for undertaking an evaluation (e.g. Wilson and Bull’s (2013) case study).

With regards to the Phillips’ ROI Methodology™, no UK-based studies or articles were found. A search for this methodology on the Open University’s database resulted in 22 unique articles. There are a number of criticisms of the methodology that have been addressed in a few of these articles, e.g. ROI in the Public Sector: Myths and Realities (Phillips and Phillips, 2004b) and Distinguishing ROI Myths from Reality (Phillips and Phillips, 2008). Criticisms include the suitability of the methodology in different contexts (e.g. public sector), the types of data required and available (‘hard’ and ‘soft’), there is no demand for ROI calculations in the organisation, the ROI result will be misused, the process is complicated and costly, and whether accounting, financial and/or statistical knowledge is required prior to learning the approach (Burkett, 2005; Ford, 2004; Phillips and Phillips, 2008; Phillips and Pulliam, 1999; Phillips and Phillips, 2004b).

Only one article could be found in an academic journal on the UK’s Chartered Association of Business Schools (C-ABS) list (rating – 2): Technology’s Return on Investment, in the *Advances in Developing Human Resources Journal* (Phillips and Phillips, 2002a). Most of the other articles provide information on how to carry out the methodology in different areas, e.g. in training (Phillips, 1996), HR (Phillips and Phillips, 2002b), performance improvement (Phillips and Phillips, 2007),

coaching (Phillips, 2007) and in the public sector (Phillips and Phillips, 2004a). These articles are quite similarly written and presented, with changes made according to the target audience. They tend to include the following elements: the evaluation framework, the process model, operating standards (the guidelines), a discussion about implementation challenges and in some articles examples of implementation(s) based on the target audience of the article.

In *Technology's Return on Investment* Phillips and Phillips (2002a) argue that the ROI methodology can be applied to investments in technology. They posit that "from the perspective of the technology specialist, the ROI methodology must be user friendly, time saving, and cost efficient" (Phillips and Phillips, 2002a, p. 516), which they believe it is ("the process presented below does meet all of the criteria" (Phillips and Phillips, 2002a, p. 517)). The authors then present the framework for the methodology and the other elements listed above, relating it to technology projects. From the explanation of the methodology, it is clear that what is actually being evaluated through the levels are the practitioners' knowledge and application of the technology. For example, level 2 "focuses on what stakeholders have learned during the project implementation" and level 3 "a variety of follow-up methods are used to determine if stakeholders use the technology" (Phillips and Phillips, 2002a, p. 519). This implies that technology investments are really human capital investments, since use of the technology supposedly improves competences. The authors report that the ROI methodology "is rich in tradition, with application in a variety of settings with more than 100 published case studies" (Phillips and Phillips, 2002a, p. 531). Yet, instead of providing a relevant case study they encourage technology staff "to develop their own impact studies [ROI evaluations] and compare with others" (Phillips and Phillips, 2002a, p. 531).

Similar to the previous article, the ROI Methodology is described in *Measuring return on investment in HR* as a feasible process that balances "many issues, including feasibility, simplicity, credibility and soundness" (Phillips and Phillips, 2009, p. 13). The abstract states that this "process is executive friendly, user friendly and almost always passes the test of very critical researchers and professors" (Phillips and Phillips, 2009, p. 12), yet the article does not provide any references to support this. In addition, as with the previous article, although the authors state "successful case applications are critical to show how ROI actually works in the organization" (Phillips and Phillips, 2009, p. 13), they do not provide any of these case studies, only using an example to explain the levels within the framework.

One of the most recent articles focused on motivational projects and programmes (Phillips et al., 2015). Here, the authors position the process of the Phillips' ROI Methodology™ as "logical and easy steps" with the evaluation costs fitting in "almost any budget" (Phillips et al., 2015, p.26). Also, even though the authors acknowledged that evaluations to levels 4 (business impact) and level 5 (ROI) were rarely accomplished because practitioners believed they were "complicated, too expensive, and unnecessary" (Phillips et al., 2015, p.26), yet, of the 11 examples of motivational programmes provided, none were evaluated to level 5 (ROI). This does raise the question of how logical and easy the steps of this methodology really are.

Finally, although the articles found explained the methodology and described the process for applying it, they did not explore the suitability of the ROI metric to measuring human capital investments. Instead, it appears that the ROI metric's suitability to this domain is accepted.

There are no published studies about the abdi ROI recommended approach.

In summary, although the ROI metric has been used in domains other than physical capital for more than four decades, there has been very little research into how it is actually applied to other types of capital (McNulty and Tharenou, 2004; Steen and Welch, 2011). Since the ROI metric was developed to ascertain the rate of return of investments in physical capital (Dearden, 1969; Johnson and Kaplan, 1987; Kaplan, 1984), applications to alternate domains may not be as straightforward and suitability for the new domains into which it is spreading cannot be assumed. Little is known about what is involved in learning and applying the ROI metric to these different types of investments.

Proponents of the ROI approaches suggest that these approaches are clear, logical and simple to apply (Nicholls et al., 2012; Phillips and Phillips, 2009; Phillips et al., 2015). However, research has shown that this is not necessarily the case in practice (Millar and Hall, 2013; Wilson and Bull, 2013). Why is this so? Is it that the approaches are not being learnt and applied as prescribed? Are the requisite conditions in place for these processes to be applied? What are these conditions for applying the ROI metric to human capital investments? Or, could it be that the ROI metric is not suitable for these types of investments?

Research also indicates that there may be different perceptions or interpretations of ROI (Botchkarev and Andru, 2011; Millar and Hall, 2013), whether ROI is being used to refer to a metric, method/approach or metaphor. In addition, there appears to be different practises when applying a prescribed ROI approach, including applying some or part of the procedures of the approach (Millar and Hall, 2013; Wilson and Bull, 2013). An empirical investigation is needed to understand the differences between the prescribed process and the actual implementation of measuring the ROI of human capital investments. Overall, how financial metrics are being used to measure investments in human capital is a potentially important yet controversial area, one that has lagged in academic research. This study addresses this knowledge gap by exploring this phenomenon within the UK. The research questions proposed are:

How appropriate are financial metrics for evaluating human capital investments? More specifically, for evaluation approaches that include the ROI metric:

1. How is the metric and approach perceived or interpreted?

As noted, ROI may be is used as a metaphor, as financial metric, or as an approach. It may be ROI is synonymous with 'value for money', as a non-specific aspiration of value. ROI as a metric is a financial formula (classic/traditional or other derivations) that involves the calculation of an investment initiative's returns/benefits and its costs/inputs, either retrospectively, predictively or both. As a method or approach, ROI refers to the procedures involved in gathering information and calculating the metric, which is necessary for consistency and credibility. The metric forms part of a ROI approach, i.e. part of the process for evaluating a human capital investment. Consequently, in order to study the metric it is necessary to study the approach in which the metric is embedded. What is unclear is whether these different uses are confusing alternatives, or usefully complementary depending on the particular situation a practitioner is in.

2. What is involved in learning and applying the approach and, by extension, the metric?

As noted above, starkly contrasting views on this can be found in the literature. What it means to learn and apply a ROI approach may start with an individual absorbing the principles and procedures of the approach and continuing with that person undertaking some or all elements of the approach within a context and introducing it into organisational practice and systems. What such learning and application involves is discussed in Chapter 2.

3. In what ways do different contexts render use of the approach (and metric) more or less challenging?

As noted, the meaning of 'return' changes in the public and non-profit contexts. Contextual uses of the term can affect the meaning, e.g. whether the return comes back to the investor or goes to some other person(s) or system(s). Therefore, contextual challenges also need to be considered when examining the transferability of the ROI metric to new domains. More generally, the use of ROI for human capital investments requires information on the financial effects of these initiatives, e.g. L&D events. It is likely that in some contexts the necessary information will be more readily gathered than others and this may be a factor explaining the differences in reported experiences. ROI approaches can also be more or less comprehensive and as a result can impact the challenges and limitations concerning application of the metric.

These issues, the perception/interpretation of the approach as well as what is involved in learning and applying it, are essential for probing the implications for appropriateness of financial metrics for appraising human capital investments. Understanding participants' perception/interpretation of the ROI approach, explicating what is involved in learning and applying it, as well as examining the challenges affecting its use in different sectors/context establish a foundation for unpacking how suitable the ROI metric is when applied to human capital investments.

1.5 Preview of the Thesis

The preceding sections provided an overview of the problem and laid the theoretical foundation for the study. Spending on human capital initiatives are being increasingly scrutinised and managers of these interventions are facing more pressure to demonstrate value for money, turning to financial metrics that were developed for other types of capital investments. A case in point is the noticeable increase in reliance on evaluation approaches that purport to evaluate the ROI of human capital investments. However, although the ROI metric has been applied sporadically to human capital investments for over 40 years, there has been very little academic research exploring how it is being applied and the appropriateness for this domain. This study aims to address this gap in knowledge by exploring how the ROI metric is applied to measuring investments in human capital in different contexts.

The final section of this chapter provides an overview of the rest of the thesis.

1.5.1 Theoretical Framework

Chapter 2 develops a conceptual framework for examining the learning of an ROI approach and its application in relation to human capital investments. It begins with an overview of two widely used models for learning and skills acquisition, Bloom's Taxonomy and Dreyfus' Five Stage Model (Bloom et al., 1956; Dreyfus and Dreyfus, 1980). This is followed by a discussion about practice, knowledge and context, and their relationship with each other. Practice and knowledge is presented as having the same level of importance with both being dependent on the context that they are in. The chapter then discusses Argyris and Kaplan's (1994) processes for applying a new technical approach. The conceptual framework is then summarised.

1.5.2 Philosophy and Methodology

The design and history of the study is explained in chapter 3. A qualitative study was required to explore the research questions, while employing a constructivist/interpretivist research paradigm. Case study research was selected as the research strategy – a single case with embedded units,

and the methods of observations, interviews and document analyses used for data collection. A collection of appropriate analytical tools was utilised to rigorously interrogate the data and to maintain research quality. These included thematic analysis, constant comparative analysis, template analysis, data displays, and cross-case synthesis.

1.5.3 Embedded Units

The case of ROI was studied by examining a selection of *attempts to learn, introduce and apply a ROI approach in practice in a particular context*. These attempts to work with the ROI approach constitute the basic unit of investigation and analysis – and for simplicity are referred to as *units* in all that follows. These units were developed using data collected within three sectors/contexts – corporate, health service and international development. These provide the settings within which the attempted applications of ROI were embedded. In total, ten such embedded units of the case study were developed across these sectors/contexts – three for corporate, four for health service and three for international development. These are presented in chapters 4 to 6. Each chapter concludes with the findings of that sector/context, which are discussed in three sections: 1) Perceptions and Interpretations of ROI, 2) applying the ROI approach, and 3) challenges to applying the ROI approach.

Corporate Context

The first set of units is presented for the corporate sector/context in chapter 4: two for an automotive company (Company CG, Cory and Chloe, and Calvin) and one for an engineering company (Company CI). Both companies provided learning services in their respective group of companies. The participants from this context interpreted the ROI approach as a framework, a discipline that provided a basis for a common language among their L&D colleagues. There is a very high emphasis on planning the initiatives using a detailed process.

The approach was felt to be difficult to grasp and apply, and took long to implement because it required an organisational culture change and data was hard to access and collect. More success

was seen at Company CG, who had sponsorship (senior management support), education (all relevant stakeholders trained in the approach), aligned incentives, as well as internal commitment. On the other hand, Company CI had just begun implementing the approach and had all relevant employees educated but did not have senior management support (sponsorship) nor aligned incentives. Instead, persons within the company who believed that they had a responsibility to evaluate key L&D initiatives demonstrated internal commitment by championing the implementation of the approach. Nonetheless, both companies shared similarities: they were using information systems (IS) to help embed key data collection processes, there was standardisation across their L&D departments, and they had developed different perceptions of themselves – as L&D experts and consultants.

Health Service Context

The four units for the health service sector/context are then presented in chapter 5. They are from one Strategic Health Authority (SHA) in the NHS – HN (Hannah, Harriet, Hank and Hazel). These practitioners interpreted the ROI approach as a change tool, where planning was key. The approach provided a detailed process they could use to determine the difference their L&D initiative made, and they were more cognisant of the business of health. Calculating the ROI was not essential. The SHA was the main sponsor, who supported the education of relevant practitioners in the ROI approach but incentives for applying the approach to all L&D initiatives were not fully instituted. This impeded the embedding of the approach. Even so, two of the participants showed internal commitment to getting the approach embedded in HN.

These units revealed that some of the reasons the ROI approach was difficult to apply were because of the practitioner's educational background, access to data (right quality, type and in the right time), inadequate execution of training needs analysis, and frequent changes of project personnel. None of the practitioners in these units undertook robust attribution analysis. The approach took long to embed because practitioners were learning the processes for applying the approach (which took time) as the implementation was taking place, while also trying to change the organisational culture regarding L&D evaluations. Many of these projects were large and complex, requiring a number of years for planning and implementation. In addition, clarification on some elements of the approach,

e.g. training needs analysis, as well as provision of guidelines on how and when to reject a request for a project evaluation is required.

International Development Context

Chapter 6 has the final set of three units from the international development sector/context, which were from one UK charity – IB (Isaiah, Ingrid and Ian). The practitioners in this context interpreted the ROI approach as a disciplined framework; i.e., a simple process that required consistent effort to implement, time and constant motivation to be properly embedded. The approach was difficult to apply in IB because it was hard to apply measurement to social change initiatives, i.e. quantifying and monetising benefits and tracking actual fully loaded costs. In addition, these initiatives were targeted at people outside of the organisation (the service system for this context is the community), therefore tracking their changed behaviour was challenging. So too was attributing the impact of the initiative to the service system.

IB educated relevant stakeholders in the ROI approach but did not have senior management sponsorship and to some extent alignment to incentives. However, the three participants showed internal commitment to getting the approach embedded in IB, especially Isaiah. Practitioners were employing better planning techniques and were able to demonstrate the difference their work made. They were also making adjustments to the approach to fit their context, such as juxtaposing the Logical Framework Approach (LFA) alongside the approach, breaking up long projects into achievable 12-month outcome objectives, re-defining L3 outcomes, as well as developing an online platform and practical training for their colleagues. The approach was taking a long time to become embedded because IB is a very large organisation and making cultural changes (i.e. moving from activity focus to outcomes/impact focus) takes time in an organisation like this. There were also frequent changes to the leadership in the countries IB operated, as well as with their own country managers. This delayed application and embedding of the approach.

1.5.4 Findings and Discussions

Chapter 7 begins with a summary of the findings from the three contexts, specifically the similarities and differences across the contexts. This is followed by a discussion along the lines of the research sub-questions.

First, the perceptions and interpretations of ROI are presented, which show a tri-fold interpretation of ROI: as a metaphor, as a metric and as a method. The study reveals that applying the ROI metric in an evaluation approach to measure human capital investments is very difficult. Actual applications of the metric are rare; instead ROI is used as a metaphor or an expressed aspiration and commitment for getting value for money for investments in human capital initiatives. In addition, when used to refer to a method, approach or framework, the entire process is not completed in most applications. Nonetheless, it is favoured as an approach because it can be viewed as a change tool, facilitating behaviour change as well as organisational culture change. The concepts learnt, particularly project planning, means it is also viewed as a planning **and** evaluation approach, not just an evaluation approach.

Second, in response to research sub-question 2, using Argyris and Kaplan's (1994) implementation processes were used to provide a convenient way to structure the discussion of the findings about what is involved in learning and applying ROI. This section included an elucidation of what actually happens when the metric is used in an approach to evaluate human capital investments. It was found that being able to capture data regarding the performance of the people in whom the investment is made, specifically regarding their cognitive, affective and psychomotor domains, was crucial for applying ROI to human capital investments. There was a general consensus across all sectors/contexts that the ROI approach was difficult to learn and implement in practice, and full implementation took years to accomplish. Two underlying reasons for this emerged from the units: 1) adopting the method was conceptually and operationally challenging for participants and 2) there was a common misconception about the scope of the approach.

Finally, to address research sub-questions 3, the challenges faced across the three contexts were discussed. The participants were evaluating human capital initiatives in two different *types* of service systems. On the one hand, the corporate and health service participants were evaluating initiatives intended to provide benefits to the organisations making the investments. On the other hand, the

international development participants were evaluating investments that would return benefits to various communities/countries across the globe. Participants from the international development sector/context faced a unique combination of challenges, including difficulties identifying suitable outcomes to target, acquiring suitable reliable data, the extended time it takes for benefits to be observed, and monetising the kinds of benefits their initiatives returned.

1.5.5 Conclusions

The final chapter presents the conclusions of the study and considers the wider implications of the findings from the case. It starts by reprising the background and rationale for the research, the logic of its design, and the concepts that have framed it. Then the findings from the case study will be reiterated, along the lines of the research sub-questions.

This will be followed by a consideration of the implications of the ROI case for the appropriateness of other financial metrics being applied to evaluate human capital investments. The appropriateness of other financial metrics is also likely to be highly contingent both on the existing data infrastructure (i.e. 1) for data linking the investment and changes in the service system performance; and 2) data on the actual costs and realized benefits) and organisational culture, as well as on the benefits being sought through the introduction of the metric. Also, since it seems that ROI functioned as a *bridging metric* and the participants treated the approach as an *aspirational map* other financial metrics may also work in this or a similar way. Therefore, the conceptual contribution of the study is that understanding the use of financial metrics for human capital can be extended if they are viewed as *bridging metrics* that provide practitioners facing complex evaluation challenges with *aspirational maps*. The chapter will end with a reflection on the limitations of the study and the priorities for further work.

1.6 Chapter Summary

This first chapter presented an introduction to the thesis. It began with a discussion of the focal theory the study contributes to, then an overview of the background theory, methodology, findings, discussions and conclusions of the study is provided.

Given the growing interest in applying financial metrics to other domains and the very limited research into how appropriate they are in these domains, this study is both timely and relevant. The study takes the application of the ROI metric to human capital investments as a case in point. To this end, relevant theories were critically reviewed, an appropriate methodology was employed (case study research), and the absorption of the ROI approach into management practice the three contexts was studied. This study addresses the knowledge gap in understanding applications of financial metrics, particularly ROI, to the domain of human capital investments.

2 Learning and Applying a New Approach

As shown in chapter 1, to explore how the ROI metric is applied to evaluating investments in human capital an examination of how practitioners learn and apply the process in which the metric is embedded is required. These practitioners are acquiring a new management approach to add to their repertoire, while blending it in with their existing knowledge and skills. This is a subtle and complex process for which success is not guaranteed. The researcher faces the problem of trying to assess the appropriateness of financial metrics for human capital investments by attempting to interpret the results of attempts to apply the metric. Was the process for applying the metric articulated with sufficient clarity to deliver successful applications? Did the individual have the requisite competences to undertake such processes? Were there adequate resources and support in place from the organisation, management, colleagues and/or professional associates? Were there favourable/unfavourable sectorial/contextual circumstances that facilitated or hindered any attempt to apply the metric?

Therefore, the aim of this chapter is to build up a conceptual map of the processes involved in learning and applying such an approach. In general terms, the conceptual map should highlight the conditions that have been found to be associated with success and failure in similar efforts. The concepts can be used to guide an investigation as well as to assist in interpreting findings (as will be discussed in Chapter 3). These concepts form the background theoretical framework of the study (Phillips and Pugh, 2005).

First, the chapter considers the way learning new knowledge and skills takes place – conceptualising this in progressive stages, which can be measured against targeted outcomes to determine how well the new approach has been absorbed. Two of the key concepts and models used within L&D, i.e. Bloom's Taxonomy and Dreyfus' Five-Stage Skills Acquisition Models (Bloom et al., 1956; Dreyfus and Dreyfus, 1980) describe these progressive stages. But, *what* needs to be learnt and acquired? *Where* is this learning taking place? The second section is a general discussion about seminal theories that are relevant to this study on knowledge (*what*), practice and context (*where*) as well as their relationship with each other. The discussion then turns to how approaches are applied in practice. This section outlines Argyris and Kaplan's (1994) processes for introducing a new technical

approach and includes an overview of the barriers to applying an approach in practice. The final section summarises key ideas from these discussions to describe the conceptual framework.

2.1 Learning and Skills Acquisition

Learning has been described as an interplay between social competence and personal experience; a dynamic, two-way relationship between people and the social learning systems in which they participate (Wenger, 2000). Learning involves the acquisition of knowledge as well as the ability to act in socially recognised ways (Brown and Duguid, 2001). That is, it is not enough that a newly qualified evaluator considers himself/herself to be an evaluator. Members of the evaluation community of practice (more on this in the next section) have to recognise and accept a new evaluator as one of them.

Whether the aim is to adopt new action strategies or change governing values, it is generally accepted that learning is acquired through progressive stages. Within the L&D and Education environment, two models of learning acquisition are well established – Bloom's Taxonomy and Dreyfus' Five-Stage Skills Acquisition Models (Bloom et al., 1956; Dreyfus and Dreyfus, 1980). These models classify learning and skills acquisition in progressive stages, arguing that understanding these stages is essential for setting objectives when designing L&D initiatives.

Benjamin Bloom and a group of fellow college examiners found that most learning objectives could be classified into one of three major domains – cognitive, affective and psychomotor (Bloom et al., 1956). In adult education, these three domains are often referred to in terms of knowledge (cognitive), skills (psychomotor) and attitude (affective) (Bloom et al., 1956; Shields, 2001). The cognitive domain objectives are those that cover recalling or recognising knowledge and developing intellectual abilities and skills (Shields, 2001). The objectives for this domain are knowledge, comprehension, application, analysis, synthesis and evaluation (Bloom et al., 1956). These are in a hierarchical order from knowledge to evaluation, where each level builds on the previous level. The affective domain deals with changes in interest, attitudes, and values, the development of appreciations and adequate adjustment (Bloom et al., 1956; Shields, 2001). This domain is focussed on the emotion of the learner

and has been further classified into five hierarchical areas – receiving, responding, valuing, organisation, and internalizing values (Krathwohl et al., 1964).

Bloom and his team did not provide objectives for the psychomotor domain but other researchers have. This domain deals with the skills of the learner. Simpson's (1966) sub-classification includes perception, set (ready to act), guided response, mechanism, complex or overt response, adaptation and origination. Alternatively, Dave's (1970) sub-classification includes imitation, manipulation, precision, articulation and naturalisation (Dave, 1970, p. 5). These classifications are somewhat similar to the Dreyfus' Five-Stage Model of Adult Skill Acquisition (Dreyfus and Dreyfus, 1980), as shown in Table 4. In their 1980 paper the Dreyfus brothers argued that, "skill in its minimal form is produced by following abstract formal rules, but that only experience with concrete cases can account for higher levels of performance" (Dreyfus and Dreyfus, 1980, p. 5). That paper described their five hierarchical stages as novice, competence, proficiency, expertise and mastery. However, this was later revised to novice, advanced beginner, competence, proficiency and expertise (Dreyfus, 2004).

Both Bloom's Taxonomy (cognitive domain) and Dreyfus' Five-Stage Model are used in the organisation that developed the ROI approach studied. Bloom's Taxonomy is applied in their Foundation award, where trainees are expected to be at the 'comprehension' level after the workshop and the 'application' level following completion of the assessment. Dreyfus's Five-Stage Model is applied in their Evaluator award, where trainees are expected to be 'competent' following the workshop and 'proficient' on completing the assessment. This can be used to guide the interpretation of the findings regarding the embedding of the approach as it relates to whether practitioners actually reached these levels.

Table 4: Objectives for learning and skills acquisition

COGNITIVE DOMAIN (Bloom et al., 1956)	AFFECTIVE DOMAIN (Krathwohl et al., 1964)	PSYCHOMOTOR DOMAIN (Simpson, 1966)	PSYCHOMOTOR DOMAIN (Dave, 1970)	DREYFUS' 5-STAGE MODEL (Dreyfus, 2004)
Knowledge	Receiving	Perception	Imitation	Novice
		Set (ready to act)		
Comprehension	Responding	Guided response		
Application	Valuing	Mechanism	Manipulation	Advanced beginner
Analysis	Organisation	Complex or Overt response	Precision	Competent
Synthesis	Internalizing Values	Adaptation	Articulation	Proficient
Evaluation		Origination	Naturalisation	Expert

2.2 Knowledge, Practice and Context

The learning and implementation process that the research is considering involves new *knowledge* being acquired (about the process for applying the ROI metric) that needs to be integrated into *practice*, within different *contexts* (sectorial and other contexts). Therefore, a discussion about these concepts is important for framing the issues explored in this study.

2.2.1 Knowledge

Knowledge has been defined as “justified true belief” in Western philosophy (attributed to Plato (Plato, 201 c-d), quoted in (Nonaka and Takeuchi, 1995, p. 21)) implying that it is somehow objective, absolute and context-free (Greenhalgh and Wieringa, 2011; Ichijo and Nonaka, 2007; von Krogh et al., 2000). However, it appears not all knowledge is covered by this definition because it may be difficult for individuals to articulate all their beliefs and justify them (Nonaka and von Krogh, 2009). Even so, human beings have been described as inherently subjective, relying on context to create

and share new knowledge (Ichijo and Nonaka, 2007). Indeed, it could be said that knowledge itself is difficult to define without relating it to its context.

Nonaka and von Krogh (2009) highlighted three complementary parts to defining knowledge: the first, as stated earlier, justified true belief where individuals use their interactions with the world to justify the truthfulness of their beliefs. Second, knowledge is “the actuality of skilful action” and/or “the potentiality of defining a situation so as to permit (skilful) action” (Nonaka and von Krogh, 2009, p. 636). The final, and quite possibly the most known, knowledge is explicit and tacit along a continuum (Nonaka and von Krogh, 2009). These could be considered aspects or dimensions of the definition of knowledge. However, a useful definition of knowledge for this study is von Krogh et al.’s (2000, p. 4) suggestion that knowledge “is a construction of reality rather than something that is true in any abstract or universal way”, and that *knowing* is not just an accumulation of facts “but a uniquely human process that cannot be reduced or easily replicated”.

What is clear here is that knowledge is more than its physical/tangible evidence that is stored in documents, databases, etc. It is also “something that people have” (Blackler, 1995, p. 1023). This has been described as the explicit-tacit double act, where explicit knowledge is knowledge that can be easily expressed and readily shared through formal means in words, numbers or sound, while tacit knowledge is harder to formalize and therefore difficult to express and share (Nonaka and Takeuchi, 1995; Polanyi, 1966; Takeuchi and Nonaka, 2004). A consensus on how these two types of knowledge are related has still not been reached, with some scholars seeing them as distinct and mutually exclusive (Cook and Brown, 1999) and others seeing them as two ends of a continuum (Nonaka and von Krogh, 2009).

Takeuchi and Nonaka (2004, p. 4) divided tacit knowledge into two dimensions – technical (“the informal and hard-to-pin-down skills or crafts”) and cognitive (the beliefs, perceptions, ideals, values, emotions, and mental models so ingrained that they are taken for granted). Other researchers have proposed different distinctions, for example, Blackler (1995, pgs. 1023 to 1026) identified five types of knowledge:

1. Embrained – “knowledge that is dependent on conceptual skills and cognitive abilities”
2. Embedded – “knowledge which resides in systemic routines”

- 3. Encultured – “the process of achieving shared understandings”
- 4. Embodied – “action oriented and is likely to be only partly explicit”
- 5. Encoded – “information conveyed by signs and symbols”

In terms of this classification, tacit and explicit knowledge appear equally important and can be expressed on a continuum, where embrained sits at one end (tacit) and encoded sits at the other (explicit) (Ichijo and Nonaka, 2007; Inkpen and Dinur, 1998; Nonaka and von Krogh, 2009). Tacit knowledge gives explicit knowledge meaning; ‘know how’ is required to ‘know that’ (Austin et al., 2008).

The term or concept *knowledge conversion* explains how tacit and explicit knowledge interact along this continuum (Nonaka and von Krogh, 2009). There are two dimensions that, when combined, provides a spiral model for knowledge creation and processing: 1) epistemological (conversion of tacit and explicit knowledge) and 2) ontological (conversion from individual to group to organisation and back to individual) (Bratianu, 2010; Nonaka and Takeuchi, 1995; Nonaka and Toyama, 2005). The epistemological dimension is the focus of this study. The ontological dimension was outside the scope because of the resources required to undertake such a study. The spiral model is Nonaka’s (1991) widely cited Socialisation Externalisation Combination Internalisation (SECI) Model (see Table 5). It can be used to guide the enquiry by helping to elucidate data regarding knowledge types.

Table 5: The Socialisation Externalisation Combination Internalisation (SECI) Model

Modes	Conversion
Socialisation (S)	Tacit to tacit
Externalisation (E)	Tacit to explicit
Combination (C)	Explicit to explicit
Internalisation (I)	Explicit to tacit

The SECI Model describes how the four modes of knowledge conversion spiral through a cycle converting tacit knowledge to explicit knowledge and vice versa (Nonaka and Takeuchi, 1995; Takeuchi and Nonaka, 2004). Tacit and explicit knowledge alternate between each other to give rise to new tacit and explicit knowledge, while mutually enhancing each other (Nonaka and von Krogh, 2009). Nonaka and Takeuchi (1995) argue that this process is interactive. Each of the four modes are explained here (Nonaka and Takeuchi, 1995; Takeuchi and Nonaka, 2004):

1. **Socialisation:** where experiences are shared leading to the creating and sharing of tacit knowledge. Tacit knowledge can be acquired directly from others without using language. Experience is the key to acquiring tacit knowledge.
2. **Externalisation:** where tacit knowledge is articulated into explicit concepts through dialogue and reflection. It takes the shapes of metaphors, analogies, concepts, hypotheses or models.
3. **Combination:** involves systemising different bodies of explicit knowledge through combining or reconfiguring existing explicit knowledge and information.
4. **Internalisation:** the process of learning, acquiring and embodying explicit knowledge into tacit knowledge. This is closely related to *learning by doing* and is an individual, psychological process (Nonaka and von Krogh, 2009).

The SECI model has been widely accepted and seems to have received little systemic criticism in the management literature (Gourlay, 2006; Travaille and Hendriks, 2010). The criticisms it has received have mainly sought to enhance the model (e.g. Cook and Brown (1999)), although there are those that find the model “wanting on empirical and conceptual grounds” (Gourlay, 2006). These criticisms have mainly focused on the philosophical treatment of knowledge (especially, the conversion of tacit and explicit knowledge), the empirical evidence provided, as well as the claims of universality among cultures (Bratianu, 2010; Cook and Brown, 1999; Gourlay, 2006; Hong, 2011; Travaille and Hendriks, 2010).

Philosophically, mainly the critics argue that tacit knowledge is at least partially inherently tacit (Gourlay, 2006; Tsoukas, 2003) and that it cannot be turned into explicit knowledge or vice versa (Cook and Brown, 1999; Tsoukas, 2003). Gourlay (2006) argues that the only empirical evidence that can be taken seriously is the bread-machine study, which shows evidence only for socialisation and externalisation. Some critics also argue that the Japanese culture and institutional elements are unique and therefore the model may prove unsuccessful since it will likely encounter friction when being locally adapted (Bratianu, 2010; Hong, 2011).

Nonaka and von Krogh (2009, p. 642) have responded to some of these criticisms: clarifying that “at one extreme end of the continuum, is embodied knowledge, hardwired into our cognition and biological functioning as individuals”, which cannot be made explicit (this is different from Blackler’s (1995) embodied knowledge). They have also highlighted psychological research on knowledge acquisition, learning, and cognition that “provides insights on the conjecture of an individual’s knowledge conversion (externalization and internalization)” (Nonaka and von Krogh, 2009, p. 643). However, the criticism about conflating knowledge conversion and knowledge transfer has some merit (Bratianu, 2010; Gourlay, 2006). Externalisation and internalisation are the only modes where tacit and explicit knowledge are actually converted, since socialisation and combination are exchanging (or combining) the same types of knowledge – tacit and explicit, respectively (Bratianu, 2010; Gourlay, 2006). Nevertheless, there is a growing stream of empirical studies that are either based on the model or test the model (Travaille and Hendriks, 2010), which will hopefully address some of the other criticisms.

Even with the criticisms, the SECI model is valuable for focusing on the connections and confrontations between tacit and explicit knowledge (Travaille and Hendriks, 2010). For a study of the application of ROI, the relationship between explicit and tacit knowledge can be used to explain how knowledge was converted (and exchanged) during the implementation of the approach.

Knowledge needs to be transferred to be beneficial, i.e. organisations can capitalise on this shared knowledge (Rowe and Widener, 2011; Stevens, 2010). As the name suggests, knowledge transfer is the transmission of knowledge from its owner (an individual, organisation or place) to another (Islam et al., 2012; Krishnaveni and Sujatha, 2012). Knowledge can be transferred without being transformed (Gherardi, 2000). There are different methods for transferring knowledge, depending on

where it falls on the tacit-explicit continuum. Krishnaveni and Sujatha (2012) summarized a number of these methods: active learning, apprenticeships, mentoring, socialization and externalization, interviewing techniques, mini case studies, brainstorming camps, metaphors and analogies, communities of practice, town hall meetings, blogs, e-learning and e-collaboration, and social networks.

2.2.2 Practice

Knowledge is a social and cultural phenomenon that is situated in practice, which give rise to formal and informal rules that are embedded into people's underlying logics and manifested in their actions (Hong, 2011). Argyris and Schön (1974, p. 6) contend that practice is a sequence of actions an individual undertakes to serve others and that a theory of practice "consists of a set of interrelated theories of action that specify for the situations of the practice the actions that will, under the relevant assumptions, yield intended consequences". Theories of action "are causal theories of how to act effectively" (Argyris, 1999, p. 56) or the underlying logics that govern people's behaviour. Theories of practice also include theories of intervention, which are theories of action that aim to enhance effectiveness (Argyris and Schön, 1974). Theories of actions are normative to the individual, explanatory and predictive (Argyris and Schön, 1974). There are two types (Argyris, 1999; Argyris and Schön, 1974):

1. Espoused theories – the values, beliefs, and attitudes that a person communicates to others, which are used to justify or describe behaviour.
2. Theories-in-use – theories that govern a person's actions or the rules that an individual actually follows. These tend to be implicit or tacit, activated automatically and spontaneously, taken for granted, and can be at different levels, dependent on the situation. These can only be inferred by observing actual behaviour.

Practice has been described as "a process by which we can experience the world and our engagement with it as meaningful" (Wenger, 1998, p. 51). It is a shared history of learning that is neither stable nor an object but "rather an emergent structure" (Wenger, 1998, p. 93). Gherardi (2000,

p. 217) asserts that “practice articulates knowledge in and about organizing as practical accomplishment” and it connects *knowing* and *doing*.

Practice can also mean routine actions or tasks designed to learn work or a competence (e.g. practicing the piano) or it may mean the work itself (e.g. medical practitioner) (Brown and Duguid, 2001; Cook and Brown, 1999). The former suggests preparation for the latter (e.g. practicing writing SMART objectives in preparation for being an evaluator). Cook and Brown (1999, p. 387) differentiate between behaviour (“doing of any sort”), action (“behaviour imbued with meaning”), and practice, which is action informed by meaning that has been drawn from a particular context. Brown and Duguid (2001, p. 203) suggests that most theorists of practice mean “undertaking or engaging fully in a task, job, or profession”. Practice as the work itself or the profession is the meaning used in this study, i.e. being an evaluator, whether in L&D or development.

Communities of practice are “groups of people informally bound together by shared expertise and passion for a joint enterprise” (Wenger and Snyder, 2000, p. 139), e.g. L&D and development evaluators, together or in the separate fields. In these communities, people hold each other accountable through joint enterprise, build their community through mutual engagement, and produce a shared repertoire of resources (Wenger, 1998; Wenger, 2000). The communities are not self-contained entities and can be changed by conditions outside of the members’ control (Wenger, 1998). When individuals join an organisation they are more likely to have joined through a particular practice (Brown and Duguid, 2001), e.g. an evaluator who joins an international development organisation has joined through his/her evaluation practice and is now part of that organisations’ evaluation community of practice. Members of these communities collectively develop an outlook on work and the world that will reflect the local community and because it is a shared perspective, therefore knowledge can be readily shared (Brown and Duguid, 2001). Individuals can collectively act to change practice deliberately or because of external conditions of an ever-changing world (Cook and Brown, 1999; Wenger, 1998). For this study, it is expected that participants would be attempting to deliberately change their evaluation communities of practice (particularly within their organisations) by learning the new ROI approach.

Communities of practice are important social units of learning because they provide opportunities to negotiate competence through direct participation (Wenger, 2000). They contain the competences

of a social learning system, which are defined by the participants in that community in a particular context (Wenger, 2000). For example, practitioners in the health service would redefine the competencies of the L&D evaluator to include ROI appraisal skills. These communities are the mediators between individuals, formal and informal social structures, organisations and the environment and they are where a good deal of work involving organisational learning occur (Brown and Duguid, 2001). Communities of practice have fluid, generally unspoken boundaries, that connect communities and offer opportunities to learn (Wenger, 2000). These external opportunities to learn provide exposure to foreign competencies that can benefit the community (Wenger, 2000). This should be beneficial in understanding what happened to practitioners in this study when their communities of practice were exposed to what would be a foreign competence – the ROI appraisal skill.

2.2.3 Context

However, knowledge and practice cannot be discussed without including context because context allows the practitioner to select the appropriate types of knowledge being converted (or exchanged), modes for suitable knowledge transfer and the relevant practice setting where these should occur. Knowledge and practice are context specific (Cook and Wagenaar, 2012; Hong, 2011; Takeuchi and Nonaka, 2004). Practice is “any kind of activity the meaning of which (including the purpose) is derived from a given context” (Cook and Wagenaar, 2012, p. 4). When individuals interpret information in a given context, which is anchored in their beliefs and commitments, it becomes knowledge (Austin et al., 2008). Transferring information without including context will often make little sense (Ichijo and Nonaka, 2007), and so is explaining a practice without contextual reference. It is therefore important to understand this concept.

A good explanation is Ichijo and Nonaka’s (2007) description using the Japanese term ‘*ba*’, which essentially means ‘place’. It is defined “as a shared context in motion, in which knowledge is shared, created and utilized” and “provides the energy, quality, and places to perform individual knowledge conversions and to move along the knowledge spiral (Takeuchi and Nonaka, 2004, p. 102). *Ba* occurs at a specific time and space through interactions; it is an existential place where participants share their contexts and also create new meanings through these interactions (Takeuchi and

Nonaka, 2004). *Ba* can emerge in individuals, groups (formal and informal) and organisations; virtually and physically (Takeuchi and Nonaka, 2004; Travaile and Hendriks, 2010). Each individual brings his or her own beliefs, value systems and experiences to this place (Ichijo and Nonaka, 2007; Takeuchi and Nonaka, 2004).

More specifically, context can also “be defined as the setting within which the phenomenon of interest of the research occurs” (Voss et al., 2016, p. 30) There are different types – individual (personal beliefs, value systems and experiences), group, organisation, as well as industry/sector. Within this study, context mainly refers to the corporate, health service and international development sectors where the participants work. Conditions exist in these contexts that help distinguish between them (Travaile and Hendriks, 2010). Therefore, the context where participants learn and apply the ROI approach would likely be reflected when they put it into practice (Brown and Duguid, 2001). This should help interpret some of the findings especially regarding how participants attempted to integrate the approach on the job. In addition, studying a phenomenon in different contexts could provide new knowledge to a research area (Voss et al., 2016).

There are similarities between communities of practice and *ba*, particularly that community members learn by participating in the community and practicing their jobs (Nonaka et al., 2001). Nonaka et al. (2001) argues that the differences are: communities of practice are where members learn embedded knowledge of the community, while *ba* is where new knowledge is created. The boundaries of communities of practice are firmly set by task, culture and the community’s history, while *ba*’s boundaries are set by its participants and can change easily – “it is created, it functions, and then it disappears, all as needed” (Nonaka et al., 2001, p. 499). They add that members of a community of practice are fairly stable; new members need time to learn about the community and become fully participatory, while *ba*’s membership is not fixed because participants come and go (Nonaka et al., 2001). Also, members of communities of practice belong to the community, while *ba*’s participants relate to *ba* (Nonaka et al., 2001). However, as can be seen from the earlier description of communities of practice, most of these are not differences but similarities. The main difference is really that members of a community of practice are fairly stable since members do need time to develop their competence in the particular practice. These concepts should be useful for understanding the findings in this study relating to the groups the participants are part of during the training as well as when they are back on the job.

2.2.4 The Knowledge-Practice-Context Relationship

“This is a situation that no one can escape. It is our nature as human beings that we are always standing at the edge of the present, venturing into an uncertain future, guided by an ambiguous history of experience, convention, artifact, and habit—and empowered by a capacity, as dazzling as it is fallible, for imagining the unrealized and then judging what we ought to do and how best to do it. Within this inescapable present, we find ourselves bound, often inexplicably, to groups of bewildered fellow actors for whom our collective past seems as inevitable as our future is inscrutable. This is all we have. This is the human condition. Yet, in such a world, most actors have learned to move about routinely in ways that more often than not are effective and responsible. How do they do it?” (Cook and Wagenaar, 2012, p. 17)

The preceding quotation from Cook and Wagenaar captures the complex relationship between knowledge, practice and context that actors balance in an ambiguous world. It also demonstrates how an actor automatically and spontaneously activates his/her theories-in-use through skilful, taken-for-granted behaviour learnt early in life (Argyris and Kaplan, 1994). This study explored how these actors (participants/practitioners) carried out the complex knowledge-practice-context relationship, i.e. how they gained knowledge about a process for measuring the ROI of human capital investments and then applied it in practice in their respective contexts.

Cook and Wagenaar (2012) chronicles the emerging views of the practice-knowledge-context relationship in their piece, *Navigating the Eternally Unfolding Present: Toward an Epistemology of Practice*. Their discussion begins with the widely accepted view of knowledge being applied in practice (where knowledge is seen as superior to practice – “we master the world by acquiring knowledge of it and applying that knowledge within the constraints of given contexts” (Cook and Wagenaar, 2012, p. 7)) and ending with a depiction of their own views of the relationship (shown in Figure 3). In their depiction, practice is seen as primary and is defined as “any kind of activity the meaning of which (including the purpose) is derived from a given context” (Cook and Wagenaar, 2012, p. 4), while knowledge and context are seen as aspects or artefacts of practice. However, their

depiction fails to demonstrate a relationship between knowledge and context, which are both inseparable from each other (Cook and Wagenaar, 2012). As noted by Greenhalgh and Wieringa (2011), many philosophers have emphasized the importance of how tacit knowledge is built from experience, shared across communities and linked to action in context.

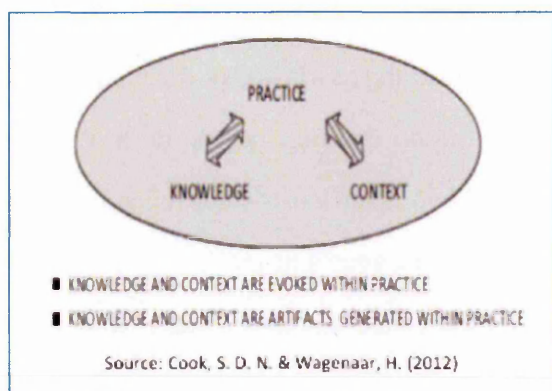


Figure 3: Cook and Wagenaar's Practice Perspective

Greenhalgh and Wieringa's (2011, p. 503) useful summary of the entwined relationship between practice, knowledge and context covered various disciplines. Of note are Polanyi's "[k]nowledge is embodied, inseparable from the knower and contiguous with practice"; Weick, Brown and Duguid's "[k]nowledge is the ability to exercise judgement within a particular field of practice."; Lave and Wenger's "[k]nowledge is contiguous with practice"; Nonaka's "[k]nowledge in an organisation takes many forms, one of which is embodied in practice"; Van de Ven's "[k]nowledge emerges from collaborative practice; and Gabbay and le May's "[k]nowledge, practice and context are inseparable".

Therefore, based on the foregoing, the relationship between practice, knowledge and context, as used in this study, is depicted in Figure 4.

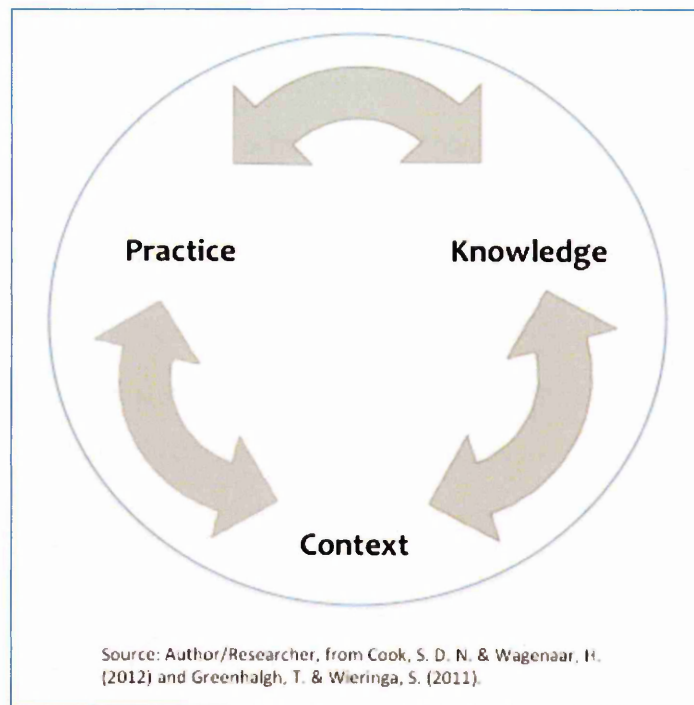


Figure 4: The relationship between practice, knowledge and context

Here, practice and knowledge appears at the same level, therefore neither is seen to be superior to the other. Context appears below to demonstrate that both practice and knowledge are dependent on the context they are in. The circular arrows depict the interdependence of this practice-knowledge-context relationship. Ichijo and Nonaka (2007) pointed out that practice lays a foundation to share knowledge (tacit) through shared experience and is also an effective way to embody knowledge (explicit) by reconnecting it to a particular context to further conduct it into knowledge (tacit). Their point can be seen in the circular arrows of Figure 4. These concepts and their relationship can help interpret the experiences reported by practitioners from different sectors/contexts (corporate, health service and international development); who embarked on a training course to increase their knowledge, wanting to apply that new knowledge in practice in their respective contexts.

2.3 Application of New Approaches in Practice

A number of researchers have studied the implementation of new ideas and practices in managing organisations (Woodman, 1989). Examples include Fuqua and Kurpius' (1993) seven principles for applying conceptual models, Kaplan and Norton's (1996) Balanced Scorecard (BSC) that is defined as a strategic management system, and Argyris and Kaplan's (1994) processes for introducing a

new technical approach. Fuqua and Kurpius' (1993) focus is on applying conceptual models and Kaplan and Norton's (1996) BSC integrates financial and non-financial performance measures to provide a *balanced* view of the organisation's performance for managers to monitor. Both can be used when implementing new management models. However, Argyris and Kaplan's (1994) processes have been specifically used for implementing a technical approach, namely, activity-based costing (ABC). The ABC Model and the ROI approach investigated in this study are similar. Both emanate from the accounting discipline to provide information to managers. While the aim of the ABC model was to provide more accurate cost and profitability information to managers (Argyris and Kaplan, 1994), the ROI approach is used to provide more rigorous information on the investments in human capital. They are also both designed to stimulate management action, i.e. "to help managers make better decisions about the use and deployment of their organization's resources" (Argyris and Kaplan, 1994, p. 84).

What Argyris and Kaplan (1994) mean by a technical approach is one that is clearly and logically explicated so that well-informed practitioners can apply it consistently (internal validity test); and for which actions to be taken for the approach to be implemented effectively are specified with expected outcomes (external validity test). Therefore, the ROI approach used in this study can be considered a technical approach since it is clearly and logically explicated and the actions to be taken to implement it are specified through workshops, workbooks and book. Hence, the Argyris and Kaplan processes have been adapted for use in this study to help understand how the ROI approach is learnt and applied in practice.

2.3.1 Argyris and Kaplan's Processes for Implementing New Approaches

Argyris and Kaplan (1994) describe two implementation processes: 1) Education and Sponsorship and 2) Create Internal Commitment.

Process 1: Education and Sponsorship

In this process participants gain an understanding of the new ideas, which they believe are valid and useful; management encourage their implementation; and the interests and incentives of the

participants are aligned to the successful implementation of the new ideas (Argyris and Kaplan, 1994). These three interdependent stages are explained below (Argyris and Kaplan, 1994) and have been adapted for this study:

1. Education is where practitioners learn and accept the logic and validity of the new technical approach, its theory and practice. There are three steps in this stage:

- 1) Identify the gaps in existing theory and practice – Phillips' early work was an extension of Kirkpatrick's Learning Evaluation Model (Phillips, 2003); it indicates that he identified a gap between theory and practice regarding evaluating the ROI of training (a human capital investment).
- 2) Articulate a new approach that corrects the gaps – Phillips, SROI and abdi's ROI approaches are all aimed at correcting the gap between the theory and practice of determining the ROI of human capital investments. Opportunities and procedures for using these approaches are well documented in articles, books and workbooks. In addition to these resources, abdi Ltd also offer UK accredited courses where their approach is taught. In this study, abdi's ROI approach is used to explore how the ROI metric is being applied to evaluate the ROI of human capital investments.
- 3) Provide examples of how the new approach benefits organisations – examples of organisations benefiting from using the ROI approach were made available through online case studies, at workshops, seminars, conferences and in marketing paraphernalia.

2. Sponsorship is where key individuals (champions) are persuaded to lead the change process. They must be persuaded that the new approach will bring value in their setting, which is usually done by individuals who have gone through step 3 of stage 1 (Education). These champions recruit more champions who would be affected by the approach by showing how and why the concepts of the ROI approach work and the benefits the organisation would receive.

An explicit structure for sponsoring and implementing technical approaches where individuals are assigned functional positions makes implementation more likely. There are two phases in this structure: Analysis and Action, with four distinct roles for each of these phases: Advocate, Sponsor, Change Agent and Target.

The phases: the approach receives sponsorship at the Analysis stage. An implementation plan for the ROI approach should also be undertaken at this stage; a plan that includes an estimate of the costs, time and resources that needs to be allocated. At the Action stage managers act on insights revealed from the ROI approach implementation plan.

The roles: One person (or organisation) can hold more than one role. The people in the first three roles can change between the two phases. The Advocate is the person who identifies the approach and attempts to launch it within the organisation. A Sponsor is the person approving the project, i.e. committing organisational and financial support. The Change Agent is the person who has been designated to prove the concept or test the approach, who could also be the Advocate. The Target is the person whose behaviour and actions are expected to change as a result of the approach. The Analysis phase can be completed without identifying a specific Target. An executive who can compel or legitimize change should sponsor the Action phase. The skill set for the Change Agent in the Analysis phase include the ability to analyse and integrate information, while for the Action phase these should include process skills that can help translate the information into decisions, actions and implementation.

These phases will guide the analysis of the findings by helping to understand the role of the participants (informants) and the phase of implementation the organisations in this study had reached.

3. **Aligned incentives** enable the change to occur within the organisation. These are organisational enablers that provide information and incentives through structures and systems that facilitate, reward and reinforce changes within the organisations to accept the new approach. Some of these include empowered employees, reduced managerial

layering, financial and non-financial rewards for implementing the approach, as well as updated information systems that produce timely and user-friendly information. Step 3 is an important but not sufficient step for implementing new approaches because of the limits to aligned incentives, which “can be traced to the distinction between external and internal commitment” (Argyris and Kaplan, 1994, p. 90) (more on this later).

Organisational Defensive Routines

Applying the new approach in practice can be affected by a wide variety of factors (Kasurinen, 2002). Tamkin, et al. (2002) highlight some of these, namely organisational factors such as the organisation’s culture and management support, the relevance of the approach to the practitioner’s job, the practitioner’s commitment to the job and level of autonomy. In addition, there may be individual factors, namely self-efficacy, motivation and ability (Tamkin et al., 2002), pre-existing levels of relevant and related (generic) skills, as well as external and internal commitment (Argyris and Kaplan, 1994). These factors increase the difficulty and speed of the change process (Kasurinen, 2002).

Argyris and Kaplan (1994) point out that there is an implicit assumption within the Analysis-Action structure that to overcome organisational barriers to implementing the approach key individuals are engaged at the right time. Even so, implementation may still not occur (Argyris and Kaplan, 1994). Managers feeling threatened by a new theory, approach or method will engage in defensive routines (Argyris and Kaplan, 1994; Fuqua and Kurpius, 1993; Sleezer et al., 1992). These individual and organisational defensive routines will block learning and the implementation of the approach (Argyris and Kaplan, 1994). Organizational defensive routines are policies, practices or actions that prevent people from experiencing embarrassment or threat, negative surprises, feeling vulnerable or incompetent, while at the same time preventing them from discovering the causes of these emotions (Argyris, 1994; Argyris, 1999; Argyris, 2004; Argyris and Kaplan, 1994). They are specific to the organization because these defences remain intact whether people leave or are new to the organisation (Argyris, 1992). Individuals who use defensive reasoning contend that they have a valid argument; it is the hallmark of being savvy and surviving (Argyris, 1992; Argyris and Kaplan, 1994).

Argyris (1992) asserts that these defensive routines exist at all levels of the organization among individuals, groups and inter-groups and is displayed in various types of activities. Defensive reasoning is overprotective, self-protective and anti-learning, creating self-sealing and self-fuelling processes that are activated under conditions where they are most likely to be counterproductive (Argyris, 1999; Argyris, 2004). Since the approach is measuring performance, people may worry it would highlight their shortcomings and some even undermine the credibility of the results (Argyris, 2004; Argyris and Kaplan, 1994). Argyris (1999) argues people employ these defensive routines as a way for the organisation and themselves to survive but this creates an issue since covering errors (or poor performances) will prevent the organisation from correcting them, while exposing the errors (poor performances) will open the individual up to criticisms. Defensive routines (barriers) against applying the ROI approach may be found in this study and this could help understand findings regarding the implementation of the approach.

Defensive reasoning rests on the four basic governing values of Model I theories-in-use: 1) to remain in unilateral control; 2) maximize winning and minimize losing; 3) suppress negative feelings; and 4) be as rational as possible (Argyris, 1999; Argyris and Kaplan, 1994). Three prevalent action strategies that arise from Model I theories-in-use are: 1) advocate position; 2) evaluate thoughts and actions (of others and self); and 3) attribute causes (Argyris, 1999). The consequences of these strategies are defensiveness, misunderstanding, self-fulfilling, self-sealing processes, as well as escalating and self-reinforcing errors (Argyris, 1999; Argyris and Kaplan, 1994).

Practitioners (whether advocates, sponsors, change agents or targets) must not only learn the approach that is to be implemented but also learn how to overcome defensive reasoning by using productive reasoning (explicit, rigorous, independent tests of the ideas being claimed) (Argyris, 1999; Argyris and Kaplan, 1994). This can be done in two steps (Argyris and Kaplan, 1994): 1) participants become aware of the degree to which they use Model I reasoning and remain within the constraints of organisational defences; and 2) introduce a new model of behaviour – Model II theories-in-use. Model II theories-in-use begin as espoused theories and therefore the challenge is to transform these espoused theories into new theories-in-use (Argyris, 1999). The governing values are 1) valid information, 2) informed choice and 3) vigilantly monitoring actions to detect and correct errors (Argyris, 1999; Argyris and Kaplan, 1994). Similar to Model I, the action strategies are to advocate,

evaluate and attribute, however in Model II these strategies are crafted using productive reasoning to encourage testing and inquiry (Argyris, 1999; Argyris and Kaplan, 1994).

New theories of action are learnt when an individual changes his/her theories-in-use for that situation (Argyris and Schön, 1974). Argyris (1990) suggests that a powerful way to learn a new theory-in-use is in conjunction with a technical (functional) discipline that describes how to achieve intended consequences, e.g. a HR activity such as evaluating human performance. Argyris and Schön (1974) believe that two types of behavioural learning exist: 1) to adopt new action strategies that achieve the existing governing variables (single-loop learning); and 2) to change the governing variables (double-loop learning). Single and double-loop learning should help to provide insights on the type of behavioural learning practitioners are engaging in.

Lipshitz (2000) provides a very good analysis of Argyris and Schön's contribution to the management literature and particularly the organisational learning field. He highlights the important impact of the concepts of theories of action, single and double-loop learning, as well as the scope and rigor Argyris and Schön employed in their research (Lipshitz, 2000). Houchens and Keedy (2009) demonstrate the usefulness of the framework for theory of practice for research and professional practice. They found that it uncovered the underlying values, beliefs, and assumptions that shape and explain behaviours (Houchens and Keedy, 2009).

However, changing Model I theories-in-use requires profound attentiveness and skill for the practitioners, as well as an interventionist who can engage practitioners in a diagnostic process that will help them understand how their actions inhibit learning (Edmondson and Moingeon, 1998). Edmondson and Moingeon (1998) argue that the intervention is extremely vulnerable to neglect because of the levels of skill and commitment required to improve practitioners' abilities for learning in difficult interpersonal exchanges, especially when faced with financial or management changes.

Process 2: Create Internal Commitment

To overcome barriers to change, Argyris and Kaplan (1994) suggest a second process, Create Internal Commitment. In this process, individuals are motivated to implement the new ideas, taking

effective action based on their implications (Argyris and Kaplan, 1994). Commitment is the amount and types of energy people devote to tasks or activities; there are two types (Argyris and Kaplan, 1994). External commitment is acting according to rules others set while internal commitment is taking personal responsibility for implementing the approach (Argyris and Kaplan, 1994). Both are required when implementing new approaches. External commitment establishes the rules and required behaviour by articulating expectations and rewards for actions undertaken, while internal commitment is seen when individuals take the initiative, seek challenges and risks, and venture out on new paths to enhance themselves and their organisation (Argyris and Kaplan, 1994). Internally committed individuals tend to be more vigilant concerning detecting and correcting errors (especially unforeseen errors) than externally committed individuals (Argyris and Kaplan, 1994). Argyris and Kaplan (1994, p. 91) contend that they strive to become knowledgeable about the new approach "because they are not willing to act unless they are relatively certain that the ideas are consistent with their underlying values and their beliefs about organizational effectiveness". Their senses of responsibility, justice, and effectiveness are on the line. Where there are external commitment and externally generated incentives, the responsibility for monitoring and maintaining the effectiveness of the approach is with the relevant senior manager (Argyris and Kaplan, 1994).

To build internal commitment, practitioners within the organisation who are involved in applying the approach (e.g. targets) should be encouraged to express their doubts and not just persuaded to participate (Argyris and Kaplan, 1994). The logic and implications of their concerns should be engaged using the concepts of the approach, i.e. instead of trying to avoid activating defensive reasoning advocates should jointly test and evaluate the approach and the concerns raised (Argyris and Kaplan, 1994). However, to do this the advocate should have considerable knowledge and confidence to engage in such a dialogue and generate productive reasoning within the framework of the approach (Argyris and Kaplan, 1994). However, this type of rational inquiry is limited by the degree to which the organisational (or group or individual) defensive routines exist and the willingness of individuals to, even temporarily, set aside their defences (Argyris and Kaplan, 1994).

2.4 Conceptual Framework

Learning to acquire new knowledge and skills to use a financial metric can be usefully understood in terms of the progressive stages towards expertise that is outlined in Bloom's (1956) and Dreyfus' (2004) models. These models chart the objectives for acquiring the knowledge and skills, respectively, of the process for applying the ROI metric, i.e. the ROI approach. Therefore, a study of this phenomenon should be attentive to the status of this progression in the participants, whether it is complete or consistent.

In addition, the literature shows that integrating new technical knowledge into an existing community of practice is not a case of individuals learning in a social vacuum but rather a social process, which is governed by the norms and assumptions of that community. This knowledge is context-dependent (ba), both explicit and tacit (SECI model) and socially located, as well as being converted and transferred to/between individuals (Nonaka et al., 2001; Wenger, 2000). Theories of action (espoused theories and/or theories-in-use) are also affected as new knowledge is embedded (Argyris, 1999; Argyris and Schön, 1974). These theories of action would have varying degrees of impact on the how the ROI approach, and particularly the ROI metric, is applied in practice.

Further questions arise concerning how differences in the sectors/contexts may affect the acceptance and application of the metric. How is learning supported in the organisation where the practitioners work? What kinds of changes are required to existing systems in the organisations (if any) to facilitate embedding the approach? Models such as Argyris and Kaplan's (1994) highlight that implementing these types of technical approaches involves making organisational changes, which requires the cooperation of stakeholders inside the organisation. In some contexts, cooperation is also needed from stakeholders outside the organisation.

The foregoing has been depicted in Figure 5: The Conceptual Framework, where the position of each theory indicates its relationship with the others in this study. The circular arrows depict the interdependence of the practice-knowledge-context relationship. It also demonstrates that the relationships of the other theories are iterative and interactive. Argyris and Kaplan's Process is shown in the centre because it is the model of applying new technical approaches being used. The argument

being that the processes would be expected where successful applications of the new ROI approach are seen. The conceptual framework will be used to structure the analysis of the data collected.

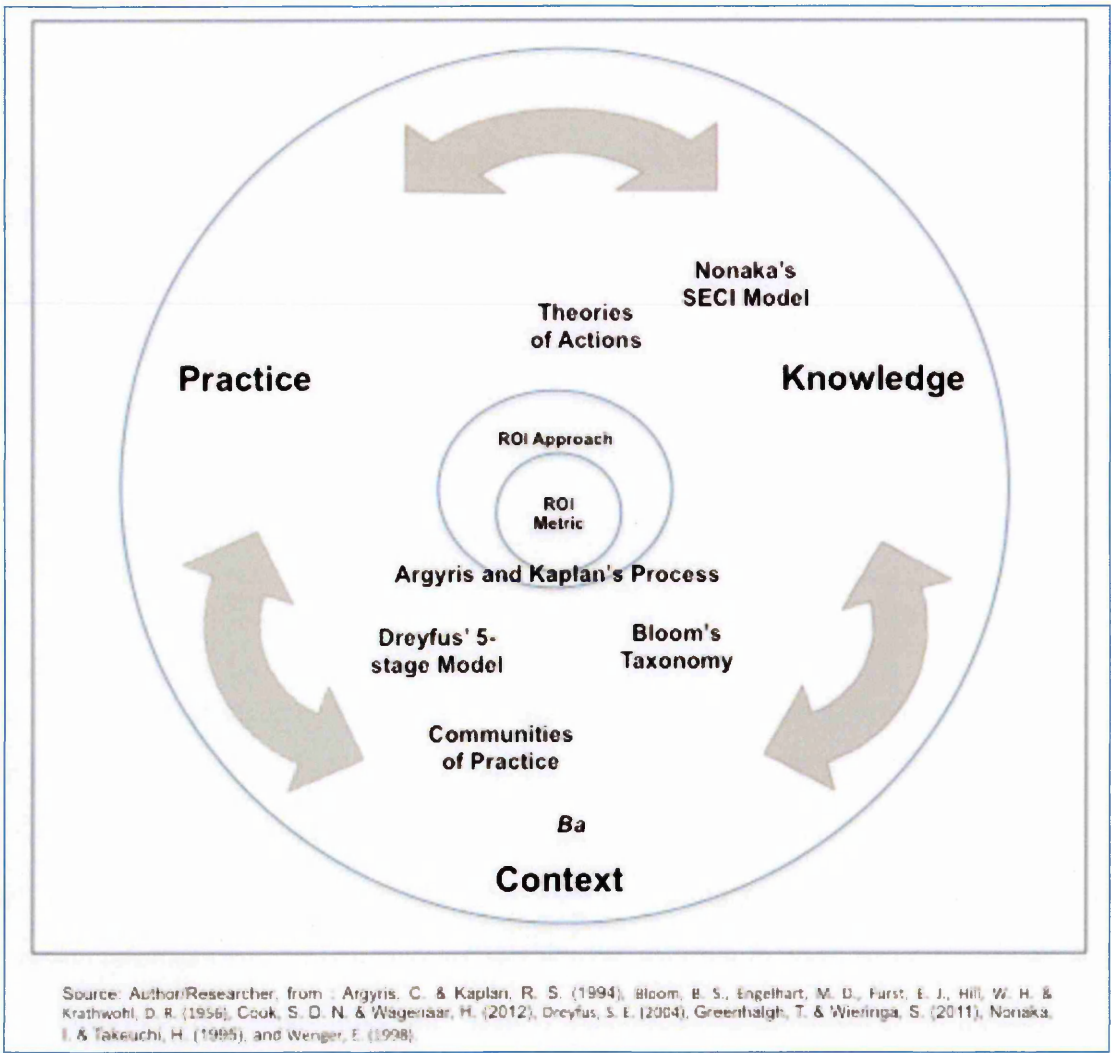


Figure 5: The Conceptual Framework

2.5 Chapter Summary

This chapter reviewed relevant and widely cited literature pertaining to learning and applying a new approach in practice that forms the background theory of this study. It began with a description of two models for learning acquisition: 1) Bloom's Taxonomy and 2) Dreyfus' Five-Stage Skills

Acquisition Model. The attention was then turned to discussions about knowledge, practice and context, particularly the explicit-tacit double act, the SECI Model, theories of actions, communities of practice and *ba*. The interdependence of the knowledge-practice-context relationship was then discussed. Although Cook and Wagenaar (2012) contend that knowledge and context are aspects of practice, a different view is taken in this study. Practice and knowledge were presented as having the same level of importance and both are dependent on the context that they are in, as well as each other.

This was followed by an explanation of Argyris and Kaplan's processes for introducing a new technical approach that is being used in this study, as well as an overview of organisational defensive routines practitioners engage in when feeling threatened. The conceptual framework for this study was then summarised in a diagram. It depicts how knowledge about the process of using the ROI metric (as part of the ROI approach) needs to be transferred in practice in different contexts (communities of practice and *ba*). Throughout this process practitioners convert different types of knowledge (SECI), change their theories of action, while also attempting to achieve their learning (Bloom's) and skills (Dreyfus') acquisition objectives.

3 Design of the Study

This chapter describes the design and logic of the study and has two sections. First, the logic of the chosen research design is explained. Then second, an outline of the research procedures adopted to rigorously carry out the design is presented.

3.1 From Research Questions to Research Design

The following research questions were explored in this study:

How appropriate are financial metrics for evaluating human capital investments? More specifically, for evaluation approaches that include the ROI metric:

1. How is the metric and approach perceived or interpreted?
2. What is involved in learning and applying the approach and, by extension, the metric?
3. In what ways do different contexts render use of the approach (and metric) more or less challenging?

Certain requirements for the research design are implicit in these questions (see Table 6 for a summary). Addressing the main research question entails identifying and having access to an evaluation approach that includes the ROI metric in its processes. Moreover, the ROI approach will need to include not just the ROI financial metric but also a range of the elements of an evaluation approach. Typically, these include formative and summative evaluation phases, assessment of the impact of an initiative, and the use of baseline data. The approach should also be applied in more than one sectors/contexts as well as in organisations and communities/countries.

Table 6: Requirements to Answer Research Questions

Elements of the Research Questions (RQs)	Requirements	How handled in this study
Main RQ: ROI approach being used to evaluate human capital investments	One or more approaches that clearly articulates a process for applying the ROI metric. More than one sectors/contexts where human capital investments are evaluated. The approach is used to evaluate human capital investments within organisations as well as in communities/countries.	The abdi ROI recommended approach
R sub-Q 1: Perception and Interpretation of ROI	A research paradigm that fits the type of study. Access to one or more ROI approaches with, preferably, more than one informant per situation; but possibility for depth rather than breadth data.	Constructivist/interpretivist research paradigms were selected Access to data (practitioners) through abdi Ltd
R sub-Q 2: Learning and applying a process for using the ROI metric	A way of tracking experiences of learning and application over time and/or longitudinal data. A pool of these experiences is required – one or two may be atypical but depth is the focus.	Case study research strategy – single case with embedded units
R sub-Q 3: Contextual challenges when applying the ROI process	The above in more than one sectors/contexts.	Corporate, Health Service and International Development

The first research sub-question seeks to explore participants' perceptions and interpretation of the ROI metric and approach. This requires scope for a constructionist/interpretivist philosophical perspective. These perspectives explain the ontology and epistemology that guide this study. Constructionism argues, "that perception and cognition are active processes, in which anything apparently 'given' is actually a product of processes of selection and construction" (Hammersley, 2013, p. 35). These processes, which are socio-cultural in character, must be the focus of the study (Hammersley, 2013; Rubin and Rubin, 2005). Interpretivism stresses cultural differences and "requires the researcher to adopt an exploratory orientation, and in particular to learn to understand the distinctive perspectives of the people involved, and perhaps also to observe how their patterns of action unfold in particular contexts" (Hammersley, 2013, p. 29). Of interest is a synthesis of understanding from combining detailed individual reports of a phenomenon (Rubin and Rubin, 2005).

As noted by Gephart Jr (2004), organisational research tends to neglect the depiction and understanding of the meanings of the organisation's members. Constructionists/Interpretivists are interested in how people view a phenomenon and the meaning they attribute to it; looking for the specific and detailed and trying to build an understanding based on those specifics (Rubin and Rubin, 2005). Differences between these philosophies exist, namely constructionists question whether it is ever possible to understand people and suggest that there are frequent incommensurable interpretations generated and circulated in the same contexts (Hammersley, 2013). Even so, they

are similar (Hammersley, 2013; Saunders et al., 2003) and have guided the interpretations of the findings in this study.

The requirement is for depth of data rather than breadth, i.e. getting beyond responses that are formulaic or the official position/line for the organisation. As a result, qualitative research was more appropriate to capture these kinds of responses. Quantitative research, which “seeks to explain outcomes by examining the frequency with which they are empirically associated with possible causes” (Hammersley, 2013, p. 1) would be more suited if a survey of opinions or attitudes regarding the metric and approach was being sought.

Qualitative research began as a resistance to quantitative measurement, experimental method and/or statistical analysis (Hammersley, 2013). Hammersley (2013, p. 12) defines it as:

“a form of social inquiry that tends to adopt a flexible and data-driven research design, to use relatively unstructured data, to emphasize the essential role of subjectivity in the research process, to study a small number of naturally occurring cases in detail, and to use verbal rather than statistical forms of analysis.”

It is inductive, descriptive and interpretive and employs the use of the participants’ meanings (emic – the insider’s view) to explain what is happening in the environments where they occur (Gephart Jr, 2004; Hammersley, 2013; Merriam, 1998; Patton, 2002; Stake, 1995). Silverman (2006) argues that being able to study phenomena, which are simply unavailable elsewhere, is its main strength. The researcher is the main data collection and analysis instrument (Merriam, 1998). Qualitative research is useful in management research as it provides detailed accounts of real-life contexts using the meanings of the participants, which provide bases to understand social processes that underlie management (Gephart Jr, 2004). Access to participants with real-life accounts of attempting to apply the approach and metric in different sectors/contexts was achieved through abdi Ltd.

The second research sub-question seeks to examine what is involved in learning and applying the approach and metric, while the third research sub-question considers the challenges of application in different contexts. Therefore, there was a methodological need for systematically capturing the experience of the participant’s attempts to apply the ROI approach in the different sectors/contexts. Ideally, this journey would begin when the practitioner recognised a need for evaluating the returns

of a human capital investment within their respective organisations, whether on their own or through discussions with colleagues. Then, participants identify/select a ROI approach, attend the relevant workshops (possibly gaining certifications at appropriate levels), where they learn and begin to work with the concepts and principles of the approach. Finally, they take back these new concepts and principles to their respective organisations and sectors/contexts to begin making changes so that they can apply the approach and ultimately the metric to evaluate the human capital investment.

However, the study could not begin at need recognition since it would be impossible to predict and select potential participants. Instead, the journey for attempting to apply the ROI approach began where knowledge acquisition chiefly occurred (i.e. at the Foundation workshop), and also includes participants' reflective recollections of what happened at needs recognition. Arguably, the attempt ends when the approach has been fully implemented to evaluate a human capital investment using the ROI metric, alongside any selective deployments and/or adaptations made to the approach within each context. In short, *the attempt to learn, introduce and apply the ROI approach in practice in a particular context* is the basic unit of analysis for this study.

Therefore, a research strategy that could encompass the preceding requirements was sought. Case study research fitted well; it falls within the constructivist/interpretivist research paradigm and can be employed with qualitative research (Baxter and Jack, 2008; Yin, 1981). It is also a comprehensive research approach that allows for the inclusion of contextual conditions (Yin, 2003). In a case study a single unit or bounded system is intensively and holistically described and analysed (Merriam, 1998). Yin (1981, p. 59, Yin's emphasis) points out that "As a research strategy, *the distinguishing characteristic of the case study is that it attempts to examine: (a) a contemporary phenomenon in its real-life context, especially when (b) the boundaries between phenomenon and context are not clearly evident.*"

Baxter and Jack (2008) identify two key approaches that guide case study research: Yin's (2003) and Stake's (1995). Yin (2003) describes three types of case studies: exploratory (to explore a phenomenon to understand it better), explanatory (to explain presumed causal links in initiatives too complex for surveys or experiments) and descriptive (describe a phenomenon and the context it exists in). Stake's (1995) description of case studies include 1) intrinsic (being intrinsically interested in the phenomenon but the results have limited transferability), 2) instrumental (the purpose is to gain

understanding of the phenomenon or refine theory), and 3) collective (where more than one case is being examined, similar to Yin's (2003) multiple-case studies). While Stake's (1995) descriptions are helpful, Yin's (2003) exploratory case study design was more aligned to the research questions in this study.

Therefore, the design used in this research is an exploratory embedded case study (or single case with sub-units) because the single case of the ROI metric being diffused to human capital investments is of interest (Yin, 2003). This case is being explored using sub-units of individual practitioner experiences who are attempting to apply the metric, while considering the challenges faced when attempts are made in different sectors/contexts. This is a powerful way of analysing within cases as well as across cases but situated within a larger case (Baxter and Jack, 2008; Yin, 2003). "The ability to engage in such rich analysis only serves to better illuminate the case" (Baxter and Jack, 2008, p. 550). This type of case study is different from multiple-case studies, which are used to predict either similar results (i.e. a literal replication) or contrasting results but for predictable reasons (i.e. a theoretical replication) (Yin, 2003). It could be argued that this study could have been designed as multiple-case studies, i.e. a description of the cases of multiple financial metrics as they are applied to human capital investments. However, that would have been beyond the scope of a doctoral study.

Case studies are advantageous when "how" or "why" questions are being asked about a contemporary set of events, over which the investigator has little or no control and is appropriate for expanding and generalising to theoretical propositions (Yin, 2003). Yin (2003) points out that it can be used where contextual conditions were deliberately being covered. It can also be used to discover and gain in-depth understanding of contexts and the meaning of the processes being studied. In this study, the case is *how* the ROI metric is being used to measure human capital investments, which can be generalised to the diffusion of financial metrics to human capital investments. As explained in chapter 2, context in this study mainly refer to the settings the practitioners practice in, i.e. the sectors where their organisations operate that may affect how the metric is applied to this type of investment. Figure 6 depicts the embedded case study (the ROI metric applied to human capital investments), with its sub-units within the three sectors/contexts.

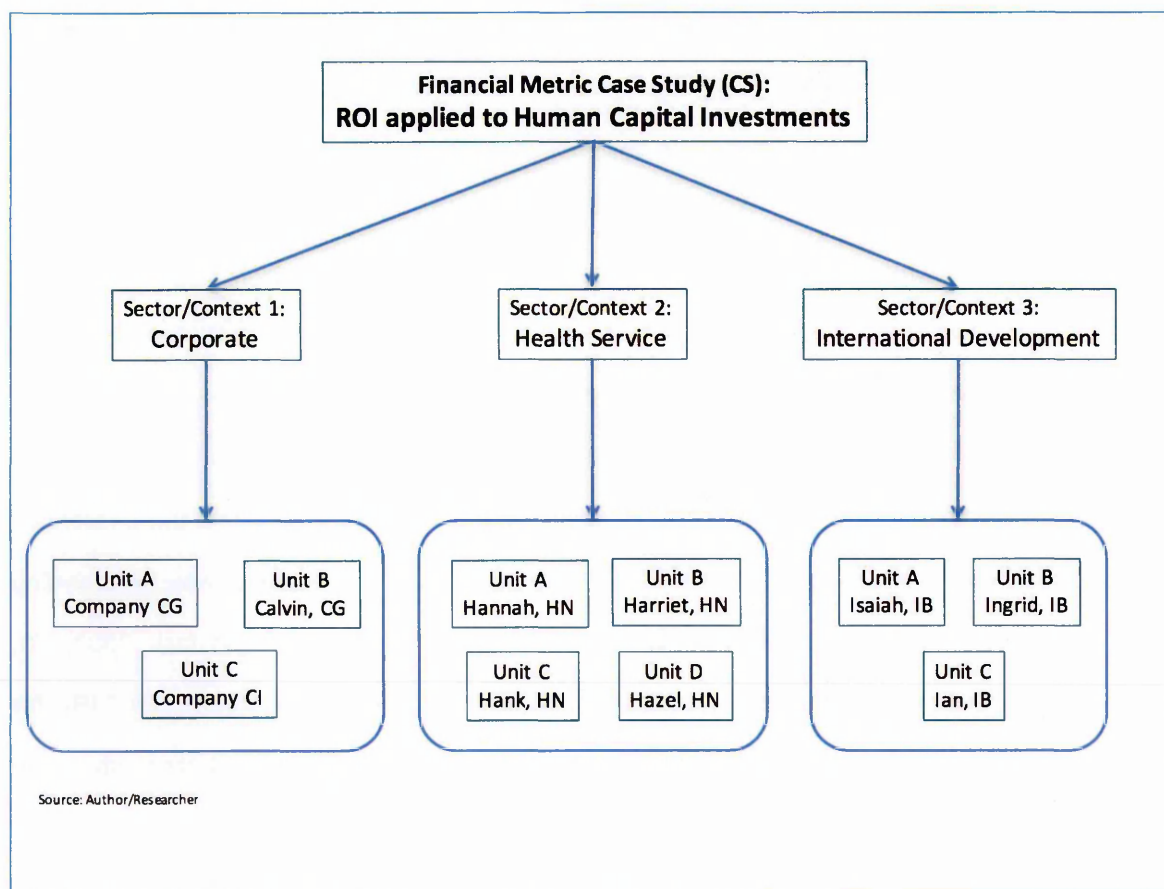


Figure 6: Embedded Case Study

In summary, the research design required a clearly articulated process for applying the ROI metric. Moreover, it should be possible to examine this process in-depth as embedded units within a case study, which can be compared and contrasted with each other within and across sectors/contexts. The three ROI approaches, Phillips', SROI and abdi's, met these requirements. Phillips' methodology was being applied mainly in the private and public sectors and the SROI approach mainly in the non-profit/third sector. However, the abdi ROI recommended approach was the only approach that was actively being applied in all three sectors. This could potentially provide interesting and useful insights about individual and organisational change during applications of technical approaches in different settings. This is especially so considering this area of activity was under-researched, notwithstanding the limited studies done on the Phillips and SROI methods. Furthermore, and crucially, the researcher required access to data for both the approach and participants. This needed to be done in an efficient and effective way to get the information required to answer the research questions; a doctoral study is very restricted in time and funding. The collaboration between the university and abdi Ltd was a unique and providential opportunity to access data to explore this intriguing phenomenon (see Appendix 1 – The OU/abdi Collaboration for background information).

3.2 Research Procedures

As explained above, the research strategy is an exploratory embedded case study, i.e. a single case with sub-units. These units captured participants' experiences about the processes involved when using the ROI metric in the different sectors/contexts. They are presented in chapters 4 to 6 (corporate, health service and international development, respectively), which also includes the findings for their respective sectors/contexts. This section focuses on the procedures undertaken for data collection and analysis.

3.2.1 Data Collection

Data for the units was collected by direct observations of workshop participants, interviews and document analyses (see Appendix 3 – Case Study Template and Appendix 4 – Data Collection Process). Using multiple sources of evidence allows for the development of converging lines of inquiry (Yin, 2003). It is also important because it enables triangulation of the data (Patton, 2002; Saunders et al., 2003; Silverman, 2006; Yin, 2003). These methods are discussed below.

Observations

Observation involves systematically observing, recording, describing, analysing and interpreting people's behaviour (Saunders et al., 2003). The aim is to enter the context where the social processes naturally occur and collect first-hand information (Silverman, 2006; Stake, 1995). Participant observation occurs when the researcher becomes a member of the group being studied, while direct observation occurs when the researcher observes from outside the group (in this study, with the learners' knowledge) (Patton, 2002; Silverman, 2006). This study began with direct observation where the researcher sat outside of the group and observed the first two abdi Foundation workshops. The researcher sat with the learners (at the end seat) for the remaining workshops because of the logistics of the room. The researcher did not actively participate in the workshops.

Observing the workshops provided the opportunity to understand and capture the environment in which the learners were engaged without being a part of it (Merriam, 1998). In addition, this first-hand experience empowered the researcher to be discovery-oriented and inductive, while providing the opportunity to see things others were not aware of or might not want to talk about (Patton, 2002). It was also a useful tool for examining the interactions between participants – learners with each other and with the facilitator. Field notes were hand written in A4 notebooks using both ballpoint and digital pens. See Appendix 5 – Observation: Workshop Outline. Consent for observing the ROI Foundation workshops was sought beforehand. Following the workshops, attendees who had passed the assessment were asked to participate in the study, i.e. be interviewed and have their assessments included.

Interviews

Interviews are deliberate discussions between one or more persons to gather data relevant to the research questions; to find out what is on their minds about these issues, which would be analysed at a later time (Merriam, 1998; Patton, 2002; Rubin and Rubin, 2005; Saunders et al., 2003). Interviews were used to capture the views of the participants. They are a source for information about the social world, participant analysis and an indirect source of evidence about the interviewee's attitudes or views (Hammersley, 2013). This method was selected because it is an effective tool for gathering interviewees' perceptions, as well as allowing for the probing of responses to understand more about their experiences in applying the approach (Rubin and Rubin, 2005). However, critics point out that the interviewee may be giving a mendacious account, and their actions may be different to what they say they do (Hammersley, 2013; Silverman, 2006). Therefore, interviews were used alongside other methods of data collection in this study.

Semi-structured interviews were used, where an interview guideline covering the themes and questions that was of interest was prepared beforehand (see Appendix 6 – Interview Guideline). The advantage of using this type of interview was that questions could be omitted or added, as well as the flow of the questions could be changed on the spot, dependent on how the interview progressed (Merriam, 1998; Saunders et al., 2003). Interviewees were encouraged to speak in their own terms about the relevant topic (Hammersley, 2013). These were done via one-to-one and two-to-one (face-

to-face and telephone) interviews, as well as participating in a project meeting. Interviews were recorded with a digital recorder for later transcription and analysis. Each participant signed a consent form.

Document Analysis

Documents refer to all written, visual and physical material that are relevant and available to the study, such as public records, assessments and personal documents (Merriam, 1998). Merriam (1998) notes that using documents as data is similar to using observation and interviews. It is systematic, while allowing for the uncovering of valuable data along the lines of the research inquiry (Merriam, 1998). The stages include allocating enough time for this process, finding the relevant material, ascertaining authenticity, accuracy and whether it is a primary or secondary source, coding and cataloguing, and then analysing (Merriam, 1998; Stake, 1995).

At each workshop, attendees were asked to carry out assessments based on an initiative that was being undertaken in his/her organisation. These were then submitted to an assessor for evaluation. The assessor provided comments on how the assessment could be improved, as well as indicated whether the attendee should be awarded a certificate (the Pearson's Edexcel – Level 4 BTEC Professional Award). Copies of the participants' evaluated assessments were collected and analysed to examine how they applied the ROI approach. Practitioners who had more experience provided copies of reports of their work.

Table 7 shows the links between the research questions, case study template, interview questions, observations (workshops), document analyses, unit sections and Argyris and Kaplan's processes.

Table 7: Links between key elements of the study

Research Questions	Case Study Template	Documents	Observation: Workshop Outline	Interview Questions	Argyris and Kaplan's processes	Unit Sections
1. How is the metric and approach perceived or interpreted?	A1, A2, D1, D2, E1, E2, E3 & E5	Marketing paraphernalia, e.g. brochures & website, assessments & impact reports, presentations	A1, A2a-c, B3b, B7	A2, B3 to B8	1. Education 2. Sponsorship	1. Perceptions and Interpretations of ROI
2. What is involved in learning and applying the approach and, by extension, the metric?	A3, B1, C1 to C6, D1 to D8, E1 to E6	Workbooks, book, presentations, impact reports, workshop assessments	A1c, A2, A3, B1 to B6	A2, B1 to B8, C1 to C14	1. Education 2. Sponsorship 3. Aligned Incentives	2. Applying the ROI approach
3. In what ways do different contexts render use of the approach (and metric) more or less challenging?	A1 to A3, B1, C1 to C6, D1 to D8, & E1 to E6	Context-specific workbooks, book, presentations, impact report, workshop assessments	Context-based workshops: A1 to A3, & B1 to B4	A1 to A3, B1 to B8, C1 to C14	1. Education 2. Sponsorship 3. Aligned Incentives	3. Challenges in applying the ROI approach

Selection of Participants

Purposeful sampling was used to select participants for this study because it allows the selection of cases that illustrate features or processes that are of interest (Silverman, 2006). The particular purposive sampling strategy employed is critical case sampling, where cases are selected because they are important or can make a point (Saunders et al., 2009). In this strategy, the focus is understanding what is happening in each case so that logical generalizations can be made (Patton, 2002; Saunders et al., 2009). Clues to look for include: will the phenomenon that is occurring in the case, occur elsewhere; will the problems being experienced likely to occur elsewhere; and if participants are having difficulties understanding the process, is that likely to happen elsewhere (Patton, 2002; Saunders et al., 2009)?

There were a number of options for selecting participants, namely:

1. Select attendees at the Foundation workshops and follow through with those that apply the ROI approach, after they had achieved their award.
2. Select key informants who were mid-way through applying the approach and follow through to completion.
3. Select key informants who had already applied the approach and conduct retrospective data collection.
4. A combination of 1 to 3.

The first option was the preferred choice; however, the fourth was eventually used. Only three participants were selected from the Foundation workshops because the others either did not complete the assessment in the time specified or never submitted an assessment. One person was from the corporate context (Calvin) and the other two persons were from the health service context (Hank and Hazel). These participants were followed as they implemented and evaluated their projects.

Key informants were targeted through abdi Ltd; persons who had already completed workshops and had experience applying the approach. These participants were also instrumental in getting the

approach implemented in their organisations. One of these key informants (Cory, from the corporate context) had just embarked on the Foundation workshop observed, even though he had been applying the approach since his company began implementing it. A unit was prepared about his company's experience (Company CG), and includes his own attempts to apply the approach to a project (his workshop assessment). Other key informants included: Cynthia and Carla, who were both from Company CI and shared their attempts implementing the approach in this company; Hannah and Harriett, who were from the health service context and shared their attempts to apply the approach on projects they were in the process of evaluating; and Isaiah, Ingrid and Ian, who were all from the international development context. Isaiah was the person who introduced the approach to his organisation and his unit is about this experience. Ingrid and Ian's units are about their most recent attempts to apply the approach to projects they evaluated.

The time it would take to track such application attempts from beginning to end would considerably exceed the duration of a doctoral study. Hence, recent (beginners) as well as experienced practitioners were included in the 10 units developed. It was important to retain all the units because each brings a unique perspective about applying ROI. The units are the participants' experiences of preparing or actually attempting to apply the ROI metric via the ROI approach.

The number of interviews for each unit is small, however, as Silverman (2006, p. 20) points out "authenticity' rather than sample size is often the issue in qualitative research". The aim was therefore to get an authentic representation of participants' experience when applying the ROI approach. Interviews were supplemented with documents and observations, when possible. In addition, participants reviewed each unit for accuracy of information and interpretation. Their sign-off enhanced the credibility of the data (Patton, 2002).

Tools

Collection tools, such as recording sheets, checklists, field notes, and digital recorders were used. Analysis was carried out using QSR NVivo v10. Participants shared their stories through a variety of ways – telephone and face-to-face interviews, and emails, see Table 8: Data Collection by Unit. In this table SM is senior manager, MM is middle manager, and O is officer.

Table 8: Data Collection by Unit

Units	Participant ID	Aliases	Observation	Interviews	Document
Corporate					
Company CG	CG1, SM	Cory	Y	2 (1 with Chloe)	Y
	CG3, O	Chloe	N	3 (1 with Cory)	Y
Calvin, Company CG	CG2, MM	Calvin	Y	2	Y
Company CI	CI5, MM	Carla	N	1	N
	CI4, SM	Cynthia	N	1	N
Health Service					
Harriet, HN	HN1, MM	Harriet	N	2 (1 with Hannah)	Y
Hannah, HN	HN2, MM	Hannah	N	2 (1 with Harriet)	Y
Hank, HN	HN3, O	Hank	Y	3	Y
Hazel, HN	HN4, MM	Hazel	Y	4	Y
International Development					
Isaiah, IB	IB1, SM	Isaiah	N	4 (1 with colleague)	Y
Ingrid, IB	IB2, MM	Ingrid	Y	1	Y
Ian, IB	IB3, SM	Ian	N	3	Y

3.2.2 Data Analysis

Data analysis is the process of taking raw data and making sense out of them as evidence-based interpretations of the phenomenon studied (Merriam, 1998; Rubin and Rubin, 2005). It is a complex process that includes classification, comparisons, and aggregation of material to extract meanings and implications that reveal patterns (Rubin and Rubin, 2005). Merriam (1998) identified three different levels:

1. Descriptive – the researcher’s narrative that compresses and links the data to convey the interpretation of what has been studied.
2. Category construction – the construction of categories or themes that represent recurring patterns across the data.
3. Theory development – this level occurs when categories are reduced, refined and linked together by a tentative hypothesis that can explain the data’s meaning.

Data triangulation, which is the use of multiple data sources in a study (Patton, 2002; Silverman, 2006), was carried out by triangulating the data collection methods indicated above. Data analysis began as soon as data collection started so that emerging findings could be further explored and themes refined. Following a data analysis plan (see Appendix 7 – Data Analysis Plan), a number of analytical techniques were employed to robustly and rigorously interrogate the data – thematic analysis, constant comparative analysis, cross-case synthesis, template analysis, and data display. These are described below with explanations and examples of how they were used in this study.

1. **Thematic analysis** – to identify, analyse and report patterns within the data (Braun and Clarke, 2006).
2. **Constant comparative analysis** – comparing one piece of data (one interview, one statement, one theme) with others to develop conceptualizations of possible relations between them (Silverman, 2006; Thorne, 2000).
3. **Cross-case synthesis** – aggregation of the findings across individual cases (Yin, 2003), in this study, across units.

The three analytical techniques were used concomitantly while developing the units (chapters 4 to 6), which have been presented in three sections/themes:

1. Perceptions and Interpretations of ROI
2. Applications of the ROI approach
3. Challenges to applying the ROI approach

For example, 'data collection' was a sub-category under the theme 'challenges in applying the ROI approach'. Within this sub-category quotations from participants were compared within and across the three contexts to reveal the challenges faced: access to data, quality of data and the timeliness of data (see Appendix 8 – Sample of Quotations from Interviews with Participants (Data Collection)).

Template – a list of codes and categories representing the themes revealed from the data, which can be pre-determined, added to and amended as data collection and analysis progresses (King,

1998; Saunders et al., 2003). Two examples are depicted in the excerpts from the QSR NVivo Software; see Figure 7 and Figure 8.

A. MQ (application of the idea and concept of ROI)

Name	Sources	References
ROI	14	52
ROI (what is being measured Money or Time)	2	5
ROI as a concept (getting returns, VIM)	11	21
ROI as a methodology or framework (abdi's)	14	43
ROI as a metric (calculating)	6	12
ROI links business needs to initiative	3	6

Source: Researcher/Author

Figure 7: QSR NVivo Excerpt (Main question - application of ROI)

B. SQ1 (application of abdi's approach)

Name	Sources	References
Costs	21	57
Data	0	0
Baseline	12	20
Benchmark	2	2
Data Analysis	9	23
Data Collection	30	166
Data Sources	20	47
Types of Data	8	11

Source: Researcher/Author

Figure 8: QSR NVivo Excerpt (Data)

Data display – *matrix display* (a table where the collected data is arranged for easy viewing in one place, illustrates the contrasts and ranges of observations, and allowing for detailed and cross-case analysis (Miles and Huberman, 1994; Saunders et al., 2003)) and *mapping* (focus on the connection and relationship between the categories or themes, with the arrows indicating directions of influence (Henderson and Segal, 2013; Merriam, 1998)). Examples of these analytical tools are – matrix display (see Table 17: Argyris and Kaplan's Processes (All Contexts – Process I (Stage 1)) on page 239) and mapping (Figure 12: Learning and Applying the ROI Approach on page 241).

Boundaries had to be created during this stage of the study because of limited resources, particularly time. In addition, decisions had to be taken on how much data analysis to include in the thesis. An

interim report was prepared for abdi Ltd that focused on the workshops observed and provided feedback on how participants were coping with learning and applying the approach, as well as recommendations for improvements to the approach. This was submitted to abdi in June 2013.

Research Quality

Empirical social research studies commonly use four tests to determine their quality (Saunders et al., 2003; Yin, 2003). These are (Merriam, 1998; Yin, 2003):

- 1. Construct validity – establish correct operational procedures for the concepts being studied.
- 2. Internal validity – establish a causal relationship, showing where certain conditions lead to other conditions.
- 3. External validity – establish domain where the findings of the study can be generalised.
- 4. Reliability – demonstrate that the operations of the study can be repeated with the same results.

Table 9 shows the actions taken to meet these requirements.

Table 9: Research Quality

Tests	Actions Taken
Construct Validity	<ol style="list-style-type: none">1. Multiple sources of evidence used (direct observation, interviews and document analyses) – triangulation2. Established a chain of evidence (there is a clear link from the research questions, to case study template/protocol, case studies reports (with audit trail) and findings)3. All key informants reviewed drafts of their case studies
Internal Validity	<ol style="list-style-type: none">1. More than one participant from each organisation2. Cross-case analysis completed within and across contexts
External Validity	<ol style="list-style-type: none">1. Analytic generalisation in single and multiple cases2. Case studies provide a rich, thick description so that readers can ascertain the transferability of the findings
Reliability	<ol style="list-style-type: none">1. Clearly articulated documented procedures covering data collection and analytical processes2. Case study template/protocol used for each case study3. Interview guidelines were prepared for each interviewee4. A case study database was created in NVivo, which was used to perform coding

3.3 Chapter Summary

Using Return on Investment (ROI) as a case in point, this study seeks to answer the research question: How appropriate are financial metrics for evaluating human capital investments? Constructivism/Interpretivism was employed as the research paradigm because participants' accounts of how they applied an ROI approach were being sought. These would provide the richest practical sources of data to allow judgements of appropriateness. Case study research was selected as the strategy, by way of an exploratory embedded case study (i.e. a single case with sub-units) to investigate the phenomenon (i.e. the case of the diffusion of ROI to human capital investments). The unit of analysis is the attempt to learn, introduce and apply a ROI approach in practice in particular sectors/contexts, with the abdi recommended ROI approach chosen as the approach. This was executed through a qualitative study, where the methods used for data collection were observations, interviews and document analyses. A selection of appropriate analytical tools was used to rigorously interrogate the data and to maintain research quality. These included thematic analysis, constant comparative analysis, template analysis, data displays, and cross-case synthesis.

4 Corporate Context – Units and Findings

This chapter presents the units and findings for the corporate context.

4.1.1 Unit A – Company CG, Cory and Chloe

Background

Company CG is an automotive company. The Learning Services (LS) Department provides five of its group members with their main training programmes. Each of these group members contributes to a central training budget. Company CG also have a distribution network that sells the products of their group members. The network is charged a training levy for training programmes that they receive from the LS Department, which is used to offset the funds provided by the group members. Before being introduced to the ROI approach, each group member in CG had their own training academy and the LS Department's main function then was to provide the training courses they requested. In 2007, following the management board's concern about the amount spent on training, the LS Department underwent a major restructure.

“So, the board basically said, ‘that’s got to stop, there is nowhere else in our business where there is no accountability for money’...it was agreed that ultimately at that point in time we were trying to get basically a methodology in to prove or disprove the value of our training. So a huge restructure then happened.” [Cory, interview 1]

The restructure not only involved implementing the ROI approach but also improving operational efficiency by consolidating the training courses that were run through the academies. The number of training courses reduced by over 70% after the creation of a group prospectus. As a result of the restructure the role of the LS team changed, *“Learning Services ultimately then were positioned as the learning and development experts”* [Cory, interview 1] This meant that the group members should no longer dictate their training needs but instead were required to consult with the LS team to explain the nature of their business problem and to discuss whether a training course could be the solution to that problem.

The restructure also resulted in the creation of a new role that became the link between the LS team and the group member (a liaison manager). These persons were trained in the ROI approach and

were held accountable for ensuring that the business issue was genuine and that the behaviour change required by the training course could be linked to the business performance. They needed to ask the right questions, *"...what are people not doing that they should be doing, how do we know that and what do we want them to be doing differently, and how do we know what we want them to do differently, what supports that, and if they do it differently, what uplifting business performance are we going to have? Oh, and by the way, how does that link to our strategic goals?"* [Cory, interview 1] Cory admitted that this was *"quite a big mind-shift, and, in fairness, you know 3 years down the line - 2 1/2 years down the line, 3 years down the line, we're still ploughing that furlough to certain degrees of success"*. [Cory, interview 1]

The LS Department has three teams that focus on product training, commercial training and administration. Cory leads the administration team, which consists of project management, resource and planning, and delegate support. Although Cory had experience using the ROI approach, he attended the abdi Foundation workshop in 2012 to gain his qualifications. He explained, *"I became the kind of spokesman or driving force ideally on ROI, I was pushing people to go on this course, oh I thought, actually I need to go on it myself in order that I can speak knowledgeably to people about, about what it involves and the benefits they gonna get from it."* [Cory, interview 1] For his workshop assessment, he selected the pilot of a coaching programme that was being funded by the LS Department. Chloe was leading the coaching project and although she had not attended the abdi Foundation workshop, she attended a half-day introductory seminar and does have some experience applying the approach. This unit gives an overview of Company CG's experience with the ROI approach. Two attempts to evaluate human capital initiatives were shared; the first was a training programme that was evaluated to L5 (ROI) and the other was Chloe's coaching project that Cory was evaluating for his assessment for the Foundation award.

Perceptions and Interpretations of ROI

Cory describes the ROI approach as a determined framework, *"a methodology that everyone thinks about and applies"*. There is now consistency in what they do, especially in reporting, and a framework to explain why they do what they do. He shared that applying the approach has helped them identify when training can and cannot be a solution. *"It's funny, you know, sometimes we would go through this approach and identify what the person needs to be doing differently but actually*

realize that they couldn't do what we wanted them to do differently because of other limiting factors, for example systems, technology ...actually our system doesn't allow us to record that information'." [Cory, interview 1] However, he admits that it is a lot of really hard work to get the stakeholders (especially group members) to understand why they are working in this way.

Chloe recalled that when she first encountered the ROI approach at a half-day introduction session it changed her perception of training from being about how good the trainer is to more about whether the trainee has gained new knowledge. She has also observed that the management team within the LS Department review all of the L1 and L2 data monthly per company (group member), and also per course. They *"look at, you know, if there are any blips or if people don't intend to use the learning, you know, if there's something... we use it as an evaluation tool to improve the quality of the materials that we're delivering to the network, so it does get used."* [Chloe, Cory and Chloe interview]

Applying the ROI approach

There has been success in applying this approach in the LS Department. Cory described the typical experience when new training courses are requested now includes working through the V Diagram [Figure 9]. When a group member comes with a business issue they begin with providing the evidence that there is a business issue and the expected outcomes required, going from L4 to L1 on the left-hand-side of the V Diagram. Once there is agreement that a training course is required, a programme is created and then delivered, going back up the right-hand-side of the V Diagram. The measurement data is also collected. At the time the LS team agrees with the group member that a training course is required, they also decide on the level of measurement that the course will be evaluated at.

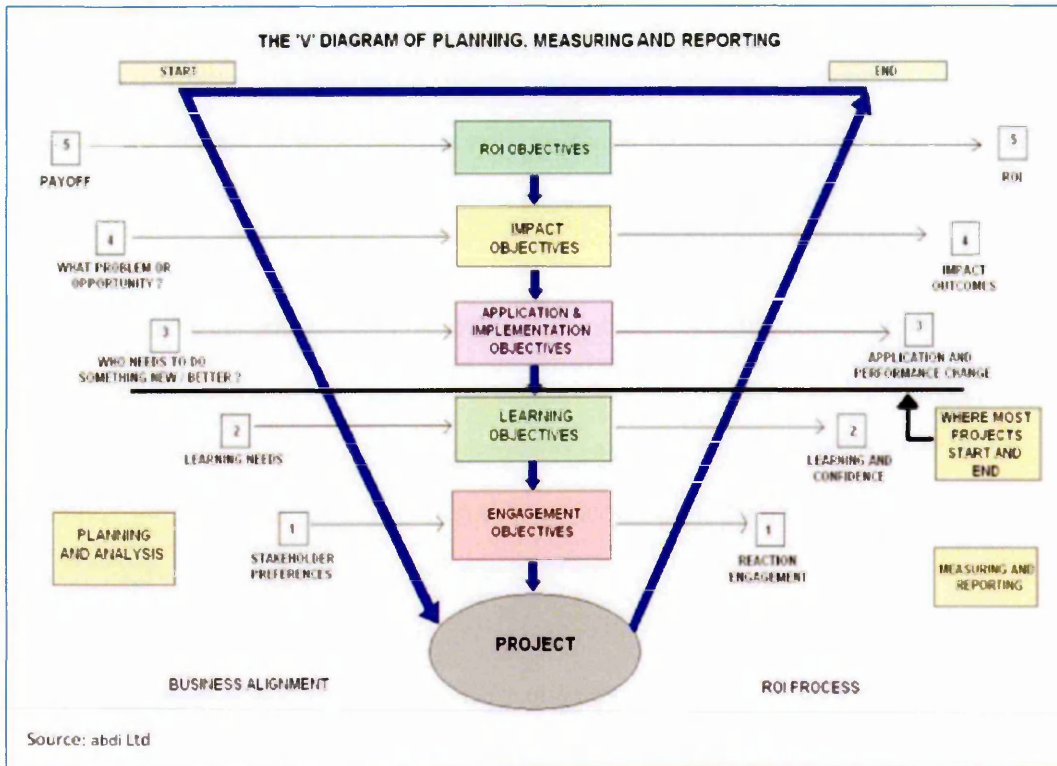


Figure 9: The V Diagram

When the approach was first introduced the LS team did not have to make many changes. All that was done was to convert the statements on the left-hand-side of the V Diagram to a set of questions to specify the direct link between the business issue and the group member's strategy. *"What are the KPIs that lead you to believe this is working? How have you identified the underperformance? Why is it an issue for you? So, if, if we could fix this, what is going to change? And then...training solution, what are people doing now, that are not doing now, that they need to be doing in the future?"* [Cory, interview 1]

Cory explained that the LS team employed a variety of data collection tools, such as surveys, interviews, assessments, and action plans but mainly used surveys. These are sent to trainees/attending delegates (L1, L2 and L3) and their line managers (L3). When it comes to isolating the impact of the training, he further shared that they use control groups in their evaluations. The LS team have evaluated to L5 on a few projects and have therefore collected cost data. They have four main cost categories: Pre-set Up, Set Up, Live Delivery, and Post Course Evaluation, which are each split by internal, external and network (distribution) costs. In their experience, they have converted data on employee time and transactional activities (e.g. keying surveys) to monetary values to calculate the ROI, using day rates and employee costs. He also shared that they include L6 (non-

monetised benefits) in their evaluation, specifically customer satisfaction and behavioural changes (as identified by line manager in L3 surveys). [Cory, email]

Cory shared one of their earliest implementation attempts, a project that was evaluated at L5 (ROI). This was carried out when abdi Ltd deployed the Phillips' ROI Methodology™. A special training programme was designed to boost sales of a new product, consisting of e-training and face-to-face classroom sessions. The specialists needed excellent knowledge of the product's features as well as superb customer service and presentation skills.

L1: of the 860 participants, 97% believed the course was relevant and useful to their roles.

L2: 66% achieved the 'stretching pass mark'.

L3: mystery shopping (of the entire customer journey) used to assess application of knowledge on the job; trained specialists scored 94% versus untrained specialists who scored 79%. Trained specialists scored higher for each element in the customer journey than untrained specialists.

L4: sales performance was improved; specialists sold 1.5 more products than untrained specialists.

L5: ROI of the training programme was 116%; calculated using monetary benefits (sales performance) and the full costs of the training programme. Actual figures are confidential.

L6: improved customer satisfaction and levels of staff retention.

Isolation technique – control group (untrained specialists); the trained specialists were the intervention group.

Cory believes a successful implementation of a training programme *"is to be able to have evidence to say that people are doing what they should be doing now, that it is actually changing or uplifting the performance of the business, and that ultimately we've spent our money wisely ...it's got to be [level] 3 to 5, you almost say 3 is just as important as getting it to 5...if we've got evidence to support*

that application of learning is happening, then almost 4 and 5 follows, should follow naturally." [Cory, interview 1]

Cory's assessment for the ROI Foundation award was the evaluation of Chloe's coaching programme. The primary driver for the coaching programme was to improve trainees' performance at L3 (behaviour change; transfer of learning in the workplace) by using coaching as a tool. *"We know when people come in here, in the four walls [the LS Department] ...generally, that they've learnt, they've passed a test, we've got the hygiene factors dealt with...so what happens, why does that learning kind of not get applied back in the workplace...ultimately, what we're trying to do here is take the onus out of supporting the individual after the course away from the network by sending in our own coaches."* [Cory, Cory and Chloe interview]

Two companies within the Company CG group were to enrol their sales advisors on to sales training programmes within the LS Department. The trainees from each company would be divided into two groups, a control group and an intervention group. The intervention group from company 1 would receive face-to-face coaching, while the intervention group from company 2 would receive both face-to-face and telephone coaching. Chloe was to provide face-to-face coaching, while telephone coaching would be outsourced to a telephone coaching company. The pilot would examine these types of coaching media *"to see if there's any difference in this behavioural transfer, if you have face-to-face coaching rather than telephone coaching. So we've agreed a standardised format between us and the coaching company so that we ask the same questions, and it's really just about the kind of, I suppose, rapport and relationship building."* [Chloe, Cory and Chloe interview]

To attain the Foundation award, Cory needed to complete the templates (see Appendix 2 – Assessment Templates) that captured the plans for implementing and evaluating the coaching pilot. Data collection would be conducted using surveys, interviews, tests (L2) and action plans, which *"will be part of the coaching conversation in terms of setting the goal before they come on the course, and then reviewing that and saying, ...'what is it that's going to stop you from achieving that goal that you set before you went on the training?'"* [Chloe, Cory and Chloe interview] A summary of the contents of his assessment follows:

L1: the LS Department has standard thresholds for L1 data. These include relevance to the job role, 85% or more; recommend to other people, 85% or more; intention to use the learning, 95% or more; new information learned, 75% or more; and an overall satisfaction in terms of the engagement and reaction on the course, 85% or more. These would be collected at the completion of the training course.

L2: the L2 check is a knowledge test, where trainees need to achieve an 80% or more pass mark. Cory noted, *“our test is only focused on knowledge, we don’t actually have anything on our level 2 that is specifically focused on skills or behaviour or attitude.”* [Cory, Cory and Chloe interview]

L3: the objective of level 3 is the *“attainment by an individual of a mean aggregate score of four or more for each of the competencies assessed”*. [Cory, Cory and Chloe interview] The trainee’s line manager and one other person (e.g. the business manager) would assess these competences. The coaches would also provide a *“dossier of evidence”* to support this metric. Data collection was to be carried out by an external supplier, who would provide the administrative service behind setting up, collecting and analysing questionnaires.

L4: the objective was to increase the *“sales orders performance”* by 15% on the coached group over the control group. The data to check this metric could be extrapolated from their customer relationship management (CRM) system, which is used by the majority of their sales advisors within their distribution network.

L5: this project would not be evaluated at L5 (ROI) because of the difficulty in converting benefits to monetary values for this project.

Stakeholders – these were identified as the trainers (LS Department), trainees (from the distribution network), trainees’ line managers, Company CG, companies within the CG group who were to participate in the project and their liaison managers, as well as external suppliers (such as the coaching company and the survey company).

Challenges to Applying the ROI approach

In the early stages of planning and implementing the coaching programme some challenges as well as enablers were identified. The data on the learning management system [LMS] was not as clean as they would like it to be. *"The data is as good as what's put in, and I've found using LMS to try and get names, current names of people working in the business and current accurate email addresses is patchy, is probably the best word."* [Chloe, Cory and Chloe interview] Chloe explained that each distributor in the network had a training coordinator who was responsible for creating a LMS login for new employees. They would identify an appropriate qualification route and training courses for the new employees to attend. However, this is not always done in a timely manner. *"...sometimes they join and they, like, join the business for like a year or six months; 'oh, I haven't put them on the system', so they don't get any training or anything."* [Chloe, Cory and Chloe interview] Therefore, the challenge is employees are in the network but not on the LMS and the LS Department are not aware of their existence. In addition, where incorrect contact details are on the system this creates gaps in reports when requests for information remain unanswered.

Other challenges to evaluating the coaching programme included minor opposition to training; Chloe noted that only one distributor had voiced opposition to training in general, specifically that he did not see the link to his business performance. Also, the sample was drawn from only one regional area but this was to enable the smooth implementation of the face-to-face part of the coaching pilot. Good communication between Chloe and the coaching company was essential and therefore a standardised coaching tool was created that would be instrumental in ensuring this was done.

Company CG underwent another major restructure in late 2012, early 2013 that affected the LS Department. The Department was informed that all of their budgets were cut and only training projects that linked directly to the key business reporting indicators would be approved. This meant that the coaching programme was cancelled. Chloe was understandably disappointed because she believes that coaching is the next step in improving the transfer of learning.

"Just because you're the right person to attend the course doesn't mean that there is necessarily going to be that transfer. So for me, this is still really important and it does link in to business results, it's a way of measuring how can we really nail, make sure that that transfer happens and we do get

the business results. To me it is a key business [objective], but I don't know if it is going to be as easy to sell that when what's important to the business is sales and profitability." [Chloe, interview 4]

She explained that all projects had to have a clear ROI and that the training budget was focused on increasing the number of qualified employees in the network and delivering qualification routes, *"the coaching project was like an extra, an add on, I suppose."* [Chloe, interview 5]

Chloe has not been on the Foundation workshop but her experience applying the approach has raised an issue for her. She believes that *"instead of using the ROI model and trying to fit it to the organization I think we should take the organization and fit it to ROI"*. [Chloe, interview 4] She believes that the evaluations are hard to do because data is being collected at an individual level rather than at an organisation level. *"And maybe that's why people find it just so hard to do return on investment because what they are trying to do is collect data that is not easily collectable and it's the data that proves the link and that's generally what the stumbling block is, isn't it?"* [Chloe, interview 4] She believes that in her organisation the data would be easier to collect at the group member level, especially for training projects that are mandatory for a whole company. The rest of the members of the group can then use that company's ROI results to determine whether to embark on that training project.

Since the approach has been applied in Company CG, Cory has observed that there has been a significant reduction in the briefs received for additional training courses. Notwithstanding that this occurred during the financial recession, he believes that this is also because group members have to do more work up front before requesting a training course and they also have been finding it difficult to provide evidence that the business issue they have identified can be resolved through training.

Although the LS team have board management support, they still face challenges from group members. *"We'll still get, 'just go away deliver this training' and sometimes we just have to do that because someone senior somewhere has committed someone and, you know, we can't not do it, but, I suppose the biggest learning for us is having gone from a kind of reactive body to a proactive body, we're the experts, we had to learn to say 'no', which is quite a hard thing to do"*. [Cory, interview 1] Nevertheless, they push forward reminding the group members that they are accountable for the

information they provide so that the LS team can create *“a learning and development intervention that is actually going to tick the right boxes because I would say historically that wasn't probably the case”*. [Cory, interview 1]

Cory concedes hurdles still exist for them to overcome, of which data is a big one. They have to collect data from their group members, who all have different agendas and strategies, as well as different sets of data, which may measure the same things using different methodologies. In addition, their trainees come from their distribution networks, which are all separate companies and there is no direct contact with them. These challenges make it hard to collect data, especially at L3 to L5.

In order to address these challenges and move the implementation of the approach forward, Cory shared some of the LS Department's plans. Their senior management team wants them to become more accountable, which would mean, *“we are given much higher authority to actually say, ‘no’, I suppose in its simplest sense, and say ‘no’, I suppose, ‘actually, you’re just spending a hundred thousand pounds for the sake of spending a hundred thousand pounds. We’ve got nothing to support or demonstrate that we’re going to get actual value here.”* [Cory, interview 1]

Another challenge they face is that Learning and Development, in general, has moved away from classroom only training. Training is being delivered through various platforms. Cory admitted, *“...our technical capabilities are restricting our ability to move our learning and development activity to the next level and beyond.”* [Cory, interview 1] They want to allow their people to learn through their chosen platform and therefore they aim to provide a more engaging experience for their learners.

The LS team, and Company CG in general, collect a lot of data. Yet, interestingly, they have found it difficult to get the data to support what they have done (training programme) and that their programme has made a difference. *“Sometimes things would fall down because we just simply can't get the data to demonstrate whether we've made a difference or not.”* [Cory, interview 1] In this regard, Cory shared that they plan to use technology to help them *“evolve their offer”*. [Cory, interview 1] They have created a new senior management role focused on this issue.

Looking back, Cory reflected on how far the LS Department had come in applying the approach, *“...on a scale of 1 to 10 in terms of our success, 1 – we've hardly done anything and 10 – brilliant. I'd say we're probably still hovering around the 4 or 5 mark. But then I think we set our goals high,*

you know, are we anywhere near having, if you like, an ROI on everything that we deliver? We are a million miles away but on key stuff, we're getting there, we've certainly got up to level 3. And level 3 is a huge, HUGE thing for us and that's where our focus is at the moment." [Cory, interview 1] He explained that L1 and L2 are within their control and they have already made tremendous strides in improving the quality of their reporting. For example, instead of focussing on their "internal success" (e.g. number of courses, how many of these courses are filled, etc.), they now provide reports that their group members and distribution networks can use (e.g. employee pass rates on courses, number of qualified people in the networks, etc.). This has a great impact on their discussions with these stakeholders because they can tailor the discussion more on improving the overall quality of their employees by having more people qualified, which is a key strategic objective.

4.1.2 Unit B – Calvin, Company CG

Background

Calvin works in the product training team in CG's LS Department, through an outsourced company. He had recently been promoted to a new role where he was responsible for 10 trainers and oversaw the planning and execution of a range of training projects. One of his projects was a programme that delivered training for the UK's National Qualifications Framework (NQF) at Level 2 (equivalent to 5x A–C grade GCSE's) and Level 3 (equivalent to 2x A Level's). The programme operated in line with the professional association for that industry as well as the Skills Funding Agency (SFA), who funds each learner signed onto the programme for both levels.

Each month, funding of these qualifications was drawn down over a pre-agreed funding period. Once that period passed funding ceased. A learner cannot be signed up to Level 3, nor can Level 3 funding be drawn down until Level 2 is completed. To be signed off at Level 2, learners are required to build two portfolios, pass online exams and complete written assignments for two qualifications (Key Skills and an industry specific qualification). These are to be assessed by a trainer and submitted to an internal verifier, who checks that it has been prepared to standard, before certification.

The main problem CG faced was that Level 2 learners were not being certified/signed off at the pre-agreed time so that Level 3 funding could be claimed. *"The issue that we've been facing is that we*

don't stick to our own timeframe and we end up going beyond it and that's when we get what we call OOFs – Out Of Funded Learners. ... The government's stop paying you because you said you'd draw it down up until this month. So suddenly, you've got learners who you're getting no money for, so no money comes in!" [Calvin, Interview 1]

Therefore, CG had a group of learners that had completed their Level 2 qualifications and they had received all the funding for them but had not yet been officially signed off. This group had started their Level 3 qualifications but CG could not claim any funding for them, as yet. *"...we can't sign them up onto Level three until Level two's been signed off. So we can't even start claiming their Level three funding. So we'll deliver it but technically they're not enrolled onto it".* [Calvin, Interview 1]

As a result, Calvin was coming under increased pressures from the finance department and his line manager. *"So, you know, finance are expecting, well you should have got half a million signed off there and now you should be drawing down so many thousand pounds each month for Level threes. We haven't had that half million and you're not drawing down anything, and it has a snowball effect. So the project was to try and limit that, to try and ensure that learners completed on time."* [Calvin, Interview 1]

The issue Calvin faced was that a number of his trainers did not have the requisite skills and knowledge to complete the portfolios to standard, so that an internal verifier could pass it. This resulted in delays in getting the learner signed off. Therefore, Calvin developed a half-day training workshop aimed at training the trainers to be able to build portfolios to the standard required so that a verifier can pass it. The main objective of this project was to reduce OOFs from 62% to 4% during the period July to September 2012, but the project was scheduled to run up to January 2013 to include other aspects such as reporting.

Perceptions and Interpretations of ROI

Calvin shared *"you hear ROI battered around this place a hell of a lot, but not everybody really knows what it means, you know. The return on investment's okay, you get back what you put in as a return, but when you drum down to it, the way abdi does, it makes it a bit clearer and it's not as straightforward as what you think. Oh, it's just about making money. At the end of it, there's a lot*

more variables that fit in that, and to achieve it there's a lot more structured planning that needs to take place." [Calvin, Interview 1] He believed the ROI approach *"...really highlighted the importance of prior planning to any, you know, any change, anything new that you're implementing in a business."* [Calvin, Interview 2] He is now more prepared to handle the situation this time around, *"So the bonus with the planning and kind of going through the ROI [i.e. the ROI approach] is you spot all these issues at the fore, right at the forefront and you can plan for it and take into account any issues or any factors that could hold you back on your target."* [Calvin, Interview 2]

An important feature brought out in the approach was the need to engage his trainers to be focused on their objective, *"...certainly the level 1 aspect is interesting. It's always been in the back of my head, it's kind of probably pushed it more to the front, and that's the buy-in from the team, that ultimately you've got to deliver those targets, we've got to deliver that project, you know."* [Calvin, interview 2]

"we don't record it very well but there is definitely signs of ROI there, and the [group] recognize it, the learners recognize it and the staff recognize what they're doing will have a positive impact in the [group]." [Calvin, interview 2]

Applying the ROI approach

The ROI approach was already being applied in Company CG, therefore, after attending a Foundation workshop, Calvin planned to use what he learnt to help him plan, monitor and evaluate his training project. Calvin's foundation award assessment provided details on how he planned to do this and are summarised below.

L1: the project facilitator (a senior trainer) would ask the trainers (in this training project, they now become the trainees) to complete an end-of course questionnaire covering relevance to job, importance of the course material to the organisation/department, new knowledge gained, views on their willingness to recommend the course to other trainers and their intention to use learning. The objective was to achieve a mean of 85% for relevance to job and importance of the course material to the organisation/department, 95% for new knowledge gained, 75% for their views on their

willingness to recommend the course to other trainers and 90% for their intention to use the learning.

The course was scheduled for July 2012.

L2: to show that they have acquired the new knowledge, trainees needed to demonstrate that they can successfully build a portfolio by logging an example portfolio to the standards required, sub-referencing each standard and criteria. This was carried out during the course in a Standardised Logging and Referencing Session. The objective was to achieve a minimum of 80% first-time portfolio submit success rate. The facilitator would collect this data during the course.

L3: by September 2012, all the trainers would need to demonstrate that they are applying the new knowledge on the job by successfully building the portfolios and logging 95% of learners who were completing their Level 2 qualifications. Calvin used a KPI Tracker (a spreadsheet to calculate OOF volumes and percentages by learner in line with their funding end date). Data on the trainees' application of the course material was collected via weekly observations and one-to-one meetings with Calvin.

L4: company CG needed to increase their revenue levels in line with their budget by producing Level 2 learners who completed and are signed off in a timely manner. There were two objectives for this training project:

1. Achieve a minimum of 95% New Measures Of Success (NMOS) (current 2nd year learners)
2. Reduce OOF learners from 62% to 4% By September 2012. This data would be collected from Company CG's Budget Report, KPI Tracker and NMOS Report. All of this data could be converted to monetary values. These would be collected from the Key Accounts Manager, Lead Internal Verifier, Facilitator (Senior Trainer), Training Team and Administration.

L5: Calvin identified the need at L5 as, "*Value for money contribution*". He noted that by achieving the second objective at L4, i.e. reducing OOF, this would contribute to 60% of the training project's cost within 6 months. This data was scheduled for collection in December 2012 to January 2013 through monthly KPI report, NMOS report and month-to-date financial budget report.

L6: at the end of the training project, employee satisfaction would be assessed through a post project staff questionnaire.

Cost Categories – Calvin identified the cost categories as: Planning Costs (Delivering Senior Trainer – 1 day); Training Design Costs (Materials, Senior Trainer); Training Delivery Costs (Training Room, 9 Trainers 1 day Train-the-Trainer, 1 Senior Trainer delivering); and Review & Measurement Costs (Training Manager & Key Accounts Manager assessment of data).

Attribution/Isolation Technique – the plan was to use trend line analysis as the isolation technique.

Barriers to achieving outcomes – Calvin identified four barriers/challenges that could influence a change in the planned outcomes: 1) Absent Learners; 2) Absent Trainees (i.e. the Trainers who needed to be trained); 3) Staff Turnover; and 4) Internal Verification backlog.

Challenges to applying the ROI approach

The first interview with Calvin was held in November 2012 and the second in February 2013. During the first interview Calvin reflected on how the project was going, *"Good, it's – I'll be honest – it's behind schedule. ...I think the good thing about the project [the assessment for the ROI award] is it makes you look at the, ... basically, what could go wrong that could limit you to succeeding and, you know, I planned them in ...I put them in and, sod's law, every one has happened!"* [Calvin, interview 1] He explained that he had experienced absent learners and trainers, as well as staff turnover (2 trainers resigned – the trainees in his project), which led to continued backlog of portfolios that required submission for internal verification. The half-day workshop was held in July 2012. The results of the project are summarised here:

L1 to L3: planned objectives were achieved.

L4: The aim of the training project was to reduce OOFs from 62% to 4% between July and September 2012. At the time of the first interview OOFs were at 19%, however by the time of the second interview it was less than 4%.

L5 (ROI): Calvin explained, *"... my manager wouldn't give me the resource, I guess, to calculate it [ROI], wouldn't see the benefits of it. ... I guess the overall outcome is, has it [the project] got the job done, end of, and you know, my bosses won't be interested in the return on investment or what you did to get that. Did you get that? Has the money come in? That's it."* [Calvin, Interview 1]

L6 (intangibles or non-monetised benefits): the mood of the staff was obvious due to the staff shortage and resulting additional workload leading to increased stress. Calvin acknowledged that determining job satisfaction was *"...something that I'd need to run but we're probably still in a position where we haven't got the whole team, everyone is naturally stressed..."* [Calvin, Interview 2]

Calvin identified his stakeholders as Company CG, other CG companies, the LS Department, his finance department, and his manager. The latter two were the main stakeholders who were keen to see immediate results of the project. *"So we have our regular meetings where we look at where we are. To be honest, they're more, kind of, dare I say, on the backside kicking me, you need to work hard and you need to produce more."* [Calvin, Interview 1]

At the start of 2013 Calvin was faced with a similar situation that led to OOFs being at 62%, i.e. a shortage of staff and therefore a backlog of portfolios that required internal verification. However, he planned on taking a proactive approach. *"...so we just accept that we are going to be low on resource over the next few months, so we're bringing our targets forward in a bid to, if they go over at least we should still complete it around similar time. So we are hoping to break the cycle, as it were but it's not easy."*

His training project highlighted that the LS Department did not have a suitable course for new trainers to gain the required skills and knowledge to build their learners' portfolios. *"So it's a training issue, hence why we have this little mini training course, it wasn't as much as what I'd hoped but it was something that we implemented and pulled into this project [the assessment for the ROI award] but the biggest issue that I've highlighted is: this course is not there to give the guys the tools they need to achieve the targets that we're setting them."* [Calvin, Interview 2] As a result of this training project his trainers have been able to build portfolios to standard and pass internal verification. An important feature brought out in the approach was the need to engage his trainers to be focused on their objective, *"...certainly the level 1 aspect is interesting. It's always been in the back of my head, it's*

kind of probably pushed it more to the front, and that's the buy-in from the team, that ultimately you've got to deliver those targets, we've got to deliver that project, you know." [Calvin, interview 2]

In going forward, Calvin planned to use this experience to advocate for additional resources, *"...I would use the ROI method as a tool to move forward with and try and put the next case forward."* [Calvin, Interview 2] His next case is advocating for more resources and ensuring that his trainers can be given more time for continuing professional development (CPD). *"So it comes down to manpower as a resource, and obviously that cost money and again it's proving that if you give us, and this is using ROI now, it's proving okay you give me an extra £100,000 worth of resource in people, this is what it will prevent, you know, £200,000 of lost revenue, you know. So, that's what I need to get to the point of, really."* [Calvin, Interview 2]

In reflecting on the impact of the ROI approach on him, Calvin emphasised the importance of this goal-focussed orientation and how to use the approach to achieve this. *"So I guess, in my head, this has brought it right at the forefront, doing the ROI has reiterated how important it is to remember through the stages. Because it always starts at level 4, isn't it? It is level 4, it always starts at the, this is what we want, now we need to work backwards to realise what we need to put in place to achieve that and then to get our level 5 and our level 6."* [Calvin, interview 2] Nevertheless, he still faced the challenge of applying the approach without his manager's support, *"I don't believe that my management have that same opinion or adopt that same method, so that's the hard thing. If I was in a position where I could enforce what I've learnt, I'd enforce everything I do. But sadly, it's not. It's more just go with it, run with it."* [Calvin, interview 2]

4.1.3 Unit C – Company CI, Cynthia and Carla

Background

Company CI is part of a public, multinational organisation, providing engineering products to niche markets across the world. Within Company CI, the Learning Services (LS) Department provides training that ensures their people understand the products and their applications and how to meet their customers' needs. To this end, they have established a corporate university where their employees can tailor their training to fit their personal needs and where the training is also tailored

to the business needs. The university, still in its infancy, will provide face-to-face and online courses, as well as virtual communities of practice.

In 2012, following participation in a ROI Foundation workshop, the LS Department began applying the ROI approach. There were no other training evaluation approaches used at Company CI.

Cynthia is the head of the LS Department. During her interview she shared that her interest in calculating the return on investment for training programmes began some time ago when she realised *"we were doing an awful lot of training, lots and lots of training, and lots of people wanted training, but we stopped asking the question, 'why?' or maybe we never asked the question, 'why?' in the first place ... so the initial ideas on, 'is it worth it?' 'Why are we doing this function?'"* [Cynthia, Interview] She recalled that during 2010 and 2011, she provided a major mandatory training programme that cost a lot of money. Following this programme the company attained significant increases in their profits and the programme was deemed successful. However, Cynthia admitted that around three or four persons have asked her how she knew that the programme was successful. This, coupled with her own discomfort of looking for anecdotal evidence rather than using a formal model to prove the success of the training programme, left her feeling bothered.

"This massive move in the profit of the company – now, is all of that down to my training? Probably not, definitely not, because there have been all sorts of other activities going on but the top line metric has been very positive for the business. ...As a group [LS Department] we're getting loads and loads of accolades about how successful this training is and how things are being different ...and we're getting better quality business as a result, but I haven't got any concrete metric, which bothers me." [Cynthia, interview]

Nevertheless, there is no drive from senior management to measure return on investment. *"So to pursue the ROI project right the way through to level 5, feels like 'yeah, it would be nice to do that' but there isn't a real pull...My organisation is not pushing me for payback information or statistics on our training. Very much the drive within our organisation is, 'training is a great idea; we want you to do whatever is necessary to do a great job with training'."* [Cynthia, Interview]

However, not long after this experience her desire for providing evidence of the ROI of their training programmes was crystallised when Carla was recruited to join the team to help improve the learning services offered to the rest of the group. Carla has previous experience with the ROI approach. Following discussions with the rest of the department, it was agreed that they would all complete the abdi Foundation workshop. Since completing the workshop, the team have been restructuring their department to improve the learning services offered to the rest of the group. The framework used in the ROI approach is influencing this restructure and systems are being implemented that will affect how data will be captured.

During 2012, while learning and applying the ROI approach, the LS Department also embarked on a number of change initiatives. This included implementing and learning a new Learning Management System (LMS), as well as learning new e-learning software and applying other changes in the business. *"We've had so many new things to learn and the learning curve on some of them has been quite steep. Actually 2012 was the year of us taking on a lot of learning and 2013 will be the year of us consolidating that; beginning to operate smartly with that learning."* [Carla, interview]

Perceptions and Interpretations of ROI

Cynthia shared that she initially thought the approach would be a process that they could learn and apply within their department, *"It isn't that. Our experience is, it's actually about a culture change in the organisation and that takes time... it wasn't charts that you fill in, it's a discipline."* [Cynthia, interview] Evaluating training programmes using this approach requires the involvement of stakeholders in the wider business, for example line managers. Carla observed that, as with many other businesses, their culture is such that many line managers believe *"they've been trained so therefore they should be doing and I haven't got the time to be monitoring whether they are or not."* [Carla, interview] Nevertheless, to evaluate the training programmes beyond L2 require input from these stakeholders on whether behaviour has changed following the programme. She added that their role as line managers, for example, does not end with approving the training but also in providing feedback on the outcomes of the training. Therefore, this part of their culture needed to be addressed.

To follow are the main changes to the LS Department that were discussed in the interviews:

The need to evaluate training – Cynthia believed that the biggest change for her team was recognising the need to evaluate their training. *“There’s a recognition that it needs to be more structured, and that we need to stop this shot gun approach because, you know, everybody wants training on everything, all the time...”* [Cynthia, interview] She describes the ROI approach as a tool that formalised how to evaluate their training programmes. However, she admits that there is a *“...level of difficulty of making the link between the training, the activity and the money ...that chain of events. It made all of us, I think, certainly after we did our projects, appreciate just how damned difficult it is!”* [Cynthia, interview]

Changes on the job – both Cynthia and Carla identified that the LS team now use a common language when discussing training and evaluation. *“What’s happened within the group is, we are all talking level 1, level 2, level 3 language all the time.”* [Cynthia, interview] *“We’ve got a common language; we’ve got a common approach; we’ve got a common template that we use now, which defines all of our training and so on; and the learning outcomes and connects that through to the business aims.”* [Carla, interview] Although Cynthia noticed that the behaviour of her team changed, where they were *“being training consultants”* instead of just trainers, she acknowledged that change did not happen overnight. *“...we’re going through that kind of metamorphosis at the moment.”* [Cynthia, interview]

Carla liked the V diagram *“I think the V diagram is good, I think, it’s a very good visual to give a very solid overview and to give a good visual focus for everything. I think a lot of what you read about ROI and a lot of the textbooks and the theories about ROI, it’s quite text-heavy a lot of the time and you can get lost in the detail. And I think, you know, the V diagram is a very good graphic and from that point of view it illustrates things very, very clearly. I think if people are struggling to pick up the concept, the V diagram is always the one thing that you can go back to and you can get them back on track.”* [Carla, interview]

Applying the ROI approach

In order to attain their qualifications, members of the LS Department each selected a training programme to apply the ROI Approach for their assessments. However, these projects were not

actually evaluated. In addition, Cynthia admitted that they have held back on evaluating their training programmes because “...we know that the LMS is going to help us with that, when we’ve got it all established properly.” [Cynthia, interview] Notwithstanding this, the interviews revealed how the approach was being applied within the department as the LS team sets about establishing systems to collect data at L1 to L5 for evaluating their training programmes. These are summarised below:

L1: the department now has a standardised questionnaire that includes 11 questions focussed on the trainee’s intention to do things differently, the relevance of the training programme to their job, and whether they would recommend the programme to others, among other questions. There is an allowance for minor tailoring based on the training programme. The benefit of having a standardised questionnaire is to have broad metrics across all the activities of the university. The questionnaire is to be sent to trainees via Survey Monkey.

L2: since learning the approach, the LS team has been mainly focussed on identifying appropriate learning outcomes for the courses they provide. However, the department plans to use a variety of pre-test and post-test activities to check if learning has occurred.

L3: the department is working with the Human Resources Department (HRD) to develop competency profiles for job families (this is discussed in more detail below).

L4: discussions have already begun with the Finance Department about the kinds of data that will be required for a ROI evaluation. However, this is in its early stages and more discussions are required.

L5: although there is no senior management drive to provide a ROI on training programmes, Cynthia realised that the approach could be used to bid for people’s time. She believed this could be achieved by demonstrating the ROI of a training programme, which would convince people to attend the training programme both as trainees and trainers (*“sharers of knowledge”*).

Even though the LS team have not yet carried out a full evaluation, they have begun applying the approach by implementing new systems to capture data at L1 and L2, and plan to use their new LMS to aid in capturing L3 data. L4 data is more challenging but discussions are already underway to

facilitate data collection. Other aspects of the approach, such as isolation techniques, were still being explored to identify the best fit for their organisation.

Cynthia admitted that in their early attempts at applying the approach, it was not done in a formal, structured way where, as in the V diagram, they start at the need for change and then go through the process (L4 to L1 and then measure L1 to L5). Instead, *"...we're ending up kind of in the middle and realising oh, let's put the formality, ...its not so structured as certainly when we did the training I felt it had to be structured otherwise it wasn't going to work. In reality I'm finding it, you kind of have to go with the flow for all sorts of reasons."* [Cynthia, interview]

Challenges to applying the ROI approach

As with the other units in this study, the LS team have encountered some challenges and received support, mainly from HRD. The challenges discussed in the interviews have been summarised below.

No management drive for ROI – Carla acknowledged that although there is no senior management drive for proving ROI for their training projects, it is part of their responsibility as training professionals to provide ROI for some key projects. However, this required time, *"...time in a physical sense of enough hours in the week, but also time in the sense that you've got to enable things to embed a little, before you run you can walk."* [Carla, interview]

Global target audience – a significant challenge the LS Department faced is that the university is providing service to a global community, where perceptions of performance review, among other organisation-wide initiatives, can be different. Therefore, getting participation, especially at L3, will be challenging.

Data collection – both with the kinds of data that needs to be collected as well as access to the data needed to conduct this type of ROI calculation. From early discussions about accessing data Carla shares that, *"we've had a range of conversations with our financial people and the keepers of key data and there's a lot then of, 'well, what do you want that for?' And, 'that's confidential information and what do you need that for?'"* [Carla, interview] Carla also believed that it is especially at L3 where

it can be difficult to collect data, *"That's the hardest part, to be honest, because, I mean, at level one and two, it's all within the control of the department. Once you get up into, even into level three, never mind into level four, as soon as you get into level three, you're relying on other people in the business to give you certain data about people's settled behaviours."* [Carla, interview] In addition, Company CI does not have one training budget that is contributed to by all the departments receiving training. Instead, each department pays for their own training, which means numerous cost centres that results in a very time consuming endeavour to consolidate the relevant costs for a particular training programme. There was also the issue of getting clean and appropriate data. *"So that's the quandary I find myself in, recognising that I need the data, I need the proof but not having time to get the data clean enough, to get the proof. That's the balance."* [Cynthia, interview]

The LS team are committed to implementing the ROI approach to structure the planning and evaluation of their training programmes. During the interviews, Cynthia and Carla shared some of their next steps.

Cynthia realised that using the ROI approach in a way that would link it to cash would put her in the best position to bid for people's time. It is this recognition that the approach could be used to get both trainees and trainers committed to attending training programmes that will be instrumental in pushing forward the further implementation of the approach in Company CI. In any case, with this realisation in mind, she believed that they would be carrying out evaluations to L5 (ROI) in the future because there was a lot of call on people's time. However, Cynthia admitted that there would be further challenges linking L3 and L4. *"I don't know when that will happen or whether it will happen, it maybe."* [Cynthia, interview]

The need for other kinds of data will have to be addressed since some of the data, especially from the Finance Department (L4), may not be capturing information for calculating the ROI of a training programme. This would require people doing an additional job for the evaluation.

Their work with HRD will play a significant part in implementing the approach because the LS team need HR data and HRD can use their LMS to manage a number of their HR activities. The LS team will collaborate with HRD as they develop their competency profiles of job families by testing them (L2) at the point of a training programme delivery. They also plan to create a 360-degree review tool

that will be linked with the HR competences, annual performance appraisals and learning outcomes. The LS team was trying to make participation of other stakeholders as simple as possible by creating electronic tools alongside their LMS to *“gather that kind of feedback from managers so that it's an email that pops into their inbox: it's a quick link with two or three quick questions to answer.”* [Carla, interview] They aim to keep learning outcomes for each course to between three and five so that L3 questions about settled behaviour can be kept to a minimum. *“...not too short to be meaningless, but not too onerous on the person to give us the feedback.”* [Carla, interview]

Cynthia summarised their experience with applying the ROI approach in this way, *“...we all know we need to do it and knowing we need to do it is a huge step, then actually trying to make it happen is another huge step ...but trying to make it happen to the point where you're not spending all of your time doing the analysis and no time making it happen, that's the balance as well ...you get the foundations in place and that becomes the way people behave, and then you get the next level, and that becomes the way people behave, then you've got that kind of continuous improvement and you bring the whole of the organisation with you at the same time.”* [Cynthia, interview]

4.2 Findings from the Corporate Units

This section presents the findings from the units depicted above. The units provided the stories of how participants applied the ROI approach, which were developed under three main sections/themes:

1. Perceptions and Interpretations of ROI
2. Applying the ROI approach
3. Challenges to applying the ROI approach

Research for the units in the corporate context was carried out in the Learning Services (LS) Departments of two companies, CG and CI. At the time of data collection CG's LS Department (CGLSD) already had almost three years' experience applying ROI approach, while CI's LS Department (CILSD) had only about nine months. Interestingly, they both embarked on implementing

the approach by changing the organisational cultures of their LS Departments, specifically by restructuring the way they planned, monitored and evaluated L&D initiatives. That is, they were changing their L&D communities of practice. Although Cory had just attended the Foundation workshop, he had been applying the approach since its inception in CG and could therefore be considered *proficient* or *expert*, while there is a case for considering Chloe an *advanced beginner* or even *competent* because of her experience (Dreyfus, 2004). Carla was completing her Practitioner certification and had prior experience applying the ROI approach and is therefore an *expert*, while the other participants, Calvin and Cynthia, had just embarked on their ROI experience and could therefore be considered *advanced beginners* (Dreyfus, 2004).

4.2.1 Perceptions and Interpretations of ROI

Practitioners in this sector/context tended to use ROI to refer to the approach, e.g. *"And maybe that's why people find it just so hard to do return on investment because what they are trying to do is collect data that is not easily collectable and it's the data that proves the link..."* [Chloe, interview 4] and *"So the bonus with the planning and kind of going through the ROI is you spot all these issues at the fore..."* [Calvin, Interview 2] as well as a metric *"are we anywhere near having, if you like, an ROI on everything that we deliver?"* [Cory, interview 1]

The ROI approach has been described as *"...a tool that formalised what we know we should be doing anyway..."* [Cynthia, CI, interview] as well as *"...a determined framework, okay, a methodology that everyone thinks about and applies. It's created consistency in a lot of the areas that we do..."* [Cory, CG, interview 1] It explains why things are done they way they are. *"...it wasn't charts that you fill in, it's a discipline."* [Cynthia, CI, interview]

A lot of emphasis is placed on planning, i.e. planning the initiative and the evaluation of that initiative, *"...it's really highlighted the importance of prior planning to any, you know, any change, anything new that you're implementing in a business."* [Calvin, CG, interview 2] It helped to think through the possibilities and how to mitigate the negative ones. This demonstrates one of the management tools (i.e. scenario planning), which has been incorporated as part of the ROI approach.

The approach has been useful for standardising the way these practitioners work, as well as providing a common language for them to communicate with each other. *“So we’ve put a lot of structural things in place which have been built on a basis of solid principles from the abdi qualification and also enabled us to have a common language to discuss those, that wasn’t there before. So that’s brought a lot of standardisation and development to the way that we just approach training design.”* [Carla, CI, interview] The foregoing forms part of the first step in Argyris and Kaplan’s processes – Education.

4.2.2 Applying the ROI approach

There is no standard definition for organisational culture (Hofstede et al., 1990; Levin, 2000). Nonetheless, based on the literature it can be seen that CGLSD’s restructuring exercise was essentially an *organisational culture change programme* to change their shared knowledge and implicit meanings about planning, monitoring and evaluating L&D initiatives – its set of assumptions, beliefs, values, morals, customs, habits and behavioural patterns that guide its perceptions, judgements and actions in this area (Cameron and Quinn, 2011; Ipe, 2003; Levin, 2000; Nonaka and Takeuchi, 1995; Schein, 2004; Trompenaars and Hampden-Turner, 2003).

The restructuring of CGLSD was greatly facilitated by getting more persons trained in the ROI approach (part of Argyris and Kaplan’s Process I step 1: Education). This resulted in two main things:

1. They were now reportedly viewed as L&D experts, sought for advice on dealing with a business issue.
2. Their daily practices have changed significantly. Evaluations were more about the outcome of the event rather than the quality of the resources inputted into the event.

The latter also includes a shift in their internal management information reporting. Instead of reporting the number of courses being run, the number of them filled and cancelled, etc., they now report on what matters – the performance of their network, e.g. the number of training attendance for each group member, the pass rate and the number of qualified people. This has been a huge change for CGLSD *“...but what that’s doing now is creating different focus within the business and perhaps highlighting the areas that we need to highlight, and perhaps get the ROI methodology considered*

higher up the agenda within the considerations within the [group members].” [Cory, CG, interview 1]

This forms part of Argyris and Kaplan’s Process I step 2: Sponsorship, particularly during the Action phase where management act on the information received. In this case, CGLSD management acted on the information they received after they started applying the approach and changed the focus of the management information reporting.

CGLSD received senior management support, which helped them make the change and embed the ROI framework. There was a clear senior management drive for them to show value for money and therefore the restructuring exercise was supported at the highest level within the group. The restructure gave them more accountability (Argyris and Kaplan’s Process I step 3: Aligned Incentive – organisational enabler, empowerment), but even so, at the time of the interviews for this research there were discussions around increasing their accountability, meaning *“we are given much higher authority to actually say, ‘no’, I suppose in its simplest sense, and say ‘no’, I suppose, ‘actually, you’re just spending a hundred thousand pounds for the sake of spending a hundred thousand pounds. We’ve got nothing to support or demonstrate that we’re going to get actual value here.”* [Cory, CG, interview 1] They were empowered (step 3: Aligned Incentives). Being seen as experts and having more accountability gave them the confidence to refuse requests they did not believe would return value for money. This also greatly reduced the effects of any resistance (defensive routines) that may have been employed by the other members of the group (Argyris and Kaplan, 1994; Tamkin et al., 2002).

There is evidence that both companies CG and CI have internal commitment (Argyris and Kaplan’s Process II), although at different levels. At Company CG, the organisation has demonstrated its commitment to embedding the ROI approach through its board actions, e.g. empowering the CGLSD team to decide on L&D initiatives. Even so, there appears to be agreement that this needs further enhancement since Cory shared that they will be given more accountability. At the individual level, Cory is both externally and internally committed to applying the approach: externally, because the approach is used by his company and internally, because of the benefits he saw, eventually deciding to become an advocate/champion and complete the Foundation course. Chloe appears to be only externally motivated, while Calvin seems to be both – externally because it is used at Company CG and internally because he saw that it could be used to help him improve in other aspects of his work, e.g. project planning. Over at Company CI, Cynthia and Carla are both externally and internally

committed to applying the ROI approach: externally (they are using this approach in their department to guide their restructure) and internally (to ascertain ROI on key L&D initiatives because they believe it is their professional duty to do so).

A summary of the findings as it relates to Argyris and Kaplan's Processes is depicted in Table 10.

Table 10: Argyris and Kaplan's Processes (Corporate)

Steps	Company CG, Cory and Chloe	Calvin, Company CG	Company CI, Cynthia and Carla
Process I: Education			
ID needs gap	CG board/senior management mandated the LS department to ascertain the ROI of training.	Recent promotion prompted Calvin to learn the ROI approach (required for new role).	Cynthia had personal revelation of the need to measure ROI of training; confirmed by Carla.
Articulate new approach	The abdi ROI recommended approach was selected (initially it was Phillips' ROI Methodology).	Signed up and completed Foundation course.	Carla was completing the Practitioner course. Cynthia and the CILSD team completed the Foundation course.
Provide examples	Initially, brochures, leaflets and websites, later via workshops, workbook and book.	Colleagues, workshops, workbook and book.	Initially, Carla and later via brochures, leaflets, websites, workshops, workbook and book.
Process I: Sponsorship			
Phase 1 – Analysis	Cory = Target (initially), later Change Agent Chloe = Target CG Liaison Officers = Targets	Calvin was not at CGLSD.	Cynthia = Advocate, Sponsor & Change Agent Carla = Advocate and Change Agent The LS team = Targets
Phase 2 – Action	Cory = Change Agent and Advocate Chloe = Target CG Liaison Officer = Targets	Calvin Role = Target	Cynthia = Advocate, Sponsor & Change Agent Carla = Advocate and Change Agent CILSD Team = Targets
Process I: Aligned Incentives			
Organisational Enablers	Provision of information: the ROI course LS team empowered by senior management	Provision of information: the ROI course Works for outsourced company	Provision of information: the ROI course
Process II: Internal Commitment			
External	Yes	Yes	Yes
Internal	Yes, senior management and Cory	Yes	Yes, Cynthia and Carla

As noted earlier, one of the key changes that occurred at both companies was the change in their own people. They now saw themselves as providing L&D services to the rest of their group as 'experts' (CGLSD) and 'consultants' (CILSD):

"...the overnight switch then was, was Learning Services ultimately then were positioned as the learning and development experts, and therefore as a [group member] you don't dictate what you want in terms of training." [Cory, CG, interview 1]

"...it's changed the behaviour of the team, particularly the training managers, it's changed their behaviour, they were all pretty good trainers, and now they're still pretty good trainers but they're actually more about being training consultants." [Cynthia, CI, interview]

CGLSD saw the number of L&D requests reduce because the companies within the group were "...finding it very difficult to provide the evidence that, what was, what they thought was a training solution was actually linked to people underperformance and link that back to what KPI is that going to change for us." [Cory, CG, interview 1] It was not about being informed by another manager within their company that a particular L&D event was required and then supplying it but rather CGLSD were viewed as experts in their field and they were sought for advice on whether an L&D intervention was required to address a business need. Then, working with the tools from the ROI framework, CGLSD determined the behaviour that required training, the most appropriate intervention that should be used to change it and whether the L&D event was that intervention. It is this ability to discuss the organisation's performance and then linking it with people performance and the L&D event that led to this changed mind-set in CG's people. It gave them more control and as such, more confidence, over the number and kinds of initiatives they should undertake.

CILSD could not give reduction rates at the time of the interviews because the approach was at an early stage of being implemented, however they provided anecdotal evidence of changes in the way similar discussions were held. *"...new girl's come on board and said, 'I need, I need, we've got to do this training.' The first thing we do is sit down and say, 'okay, what's the learning outcomes? and you know, within the team we're saying, well we're trying to work out what the level 2s are. But, because [Carla] is a practitioner, she's actually also saying, 'yeah but what's the level 3?', 'what behaviours?*

what do we want them to do differently?’ ‘how do we want them to behave differently?’” [Cynthia, CG, interview]

Here a difference in how the approach is actually applied in both companies can be seen. CGLSD actually applies the approach in a more structured way. Their stakeholders approach them “...*with a business issue, we would work that through. We would work down the left hand side of the V diagram and say, ‘right, where’s your evidence, di de dah, what do you want to achieve’ and then we would say, ‘right, fine we believe training, or development of people can actually change this area of our, of business’ and, we put together the training programme and then we would deliver it back up the right hand side of the model.*” [Cory, CG, interview 1]

At CILSD, the approach was not being applied in this formal, structured way, “...*we’re ending up kind of in the middle and realising ‘oh, let’s put the formality’, ...its not so structured as certainly when we did the training I felt it had to be structured otherwise it wasn’t going to work. In reality I’m finding it, you kind of have to go with the flow for all sorts of reasons.*” [Cynthia, CI, interview] While CGLSD was more focused on business impact (L4), the business need and whether the L&D was the solution to that need; CILSD was still grappling with identifying learning outcomes (L2) and behaviour change (L3). Nonetheless, changing of the organisational culture was in its early stages at CILSD. Even though the CILSD team members saw themselves as ‘training consultants’ the rest of Company CI had not yet changed their perception of them. Instead, they still approached them already believing that an L&D intervention was the solution to their business need.

Both companies had similar successes in other areas. This included both companies discarding what the L&D sector calls ‘Happy Sheets’ (The Open University, 2007). These are the evaluation sheets issued at the end of a training event that (at both companies) collected data on the quality of the food, venue, etc. They both now used the L1 recommended questions on standardised questionnaires, which are issued at all L&D events. These questions cover the relevance of the event to the organisation, as well as the person’s role, whether there was any new information learnt, their intention to use this information and if they would recommend the event. At CGLSD these questions were standard and there were standard thresholds for each across all L&D events, which were collected on pre-printed questionnaires. However, CILSD had 11 questions on their questionnaire, allowing for minor tailoring dependent on the event. They planned to use the online survey tool,

Survey Monkey, to collect this data. These questions give an indication of the engagement of the people participating in the initiative, i.e. whether there is buy-in at L1. They also both used assessment activities at L2 (e.g. post-tests).

4.2.3 Challenges to applying the ROI approach

A key feature of the ROI approach is the chain of impact, which is “[t]he steps taken to demonstrate the links between an initiative/activity and the long-term outcome (impact)” (Massy and Harrison, 2014). *“...the level of difficulty of making the link between the training, the activity and the money at the end of the day. That chain of events, it made all of us, I think, certainly after we did our projects, appreciate just how damned difficult it is!”* [Cynthia, CI, interview]

To demonstrate the chain of impact, data is collected and analysed at five levels, and then reported at six levels. These kinds of data are hard to collect because the access to, quality of and types of data relevant to outcomes at each of these levels presents various kinds of challenges. With regards to access, CGLSD faced access issues from the other members of the group, as well as not being able to directly contact some of their trainees because their roles meant they have no access to a computer. This was particularly challenging for collecting data to measure L3 outcomes. CILSD's issue was from other departments, e.g. finance. *“...we've had a range of conversations with our financial people and the keepers of key data and there's a lot then of, 'well, what do you want that for?' And, 'that's confidential information and what do you need that for?' And, 'we do return on investment' but they're not talking about on training, they're talking about the general return on investment in the business. And, 'why do you need access to that data?'”* [Carla, CI, interview] In both units, they have to explain why Learning Services require performance data on the organisation or particular people.

In terms of types, both companies conceded that their organisations collected a lot of performance data but not necessarily relevant to their evaluation needs. The data required to calculate the ROI of physical capital is different from that required for human capital. *“...there's also the fact that they're not necessarily gathering the data we need. ... they're gathering the data they need for their job and to report on their metrics. We may have a need for different data related to different metrics and then*

asking people to gather that data separately is asking somebody to do another job.” [Carla, CI interview] At Company CG, “...they’ve [the members of the group of companies] all got different strategies and, and agendas, and they all have different sets of data, they might actually measure the same thing differently, with different methodology, so therefore actually getting that data and being able to benchmark it is quite difficult.” [Cory, CG, interview 1]

Both companies have Learning Management Systems (LMS) and cite data quality as a major issue to resolve. They both have to deal with incomplete and incorrect data being supplied. *“The data is as good as what’s put in...” [Chloe, CG interview 3]* Therefore, some sort of balance is required, *“...So that’s the quandary I find myself in, recognising that I need the data, I need the proof but not having time to get the data clean enough, to get the proof. That’s the balance.” [Cynthia, CI, interview]*

CGLSD used control groups when they evaluated to L4 and L5. It seemed this was the preferred attribution technique. During day 2 of the workshop observed, it became apparent that the estimation technique would not likely be used as the attendees raised the issue of its subjectivity, with one person commenting that it was *“a bit woolly”* and another stating that since it takes a conservative approach, it might *“dumb down”* their influence. [See Dadd (2013a) for a discussion on attribution techniques.]

In any case, CGLSD have only been able to take two or three evaluations to L5 because it was difficult to convert benefits to monetary values on some projects and they had been too reliant on the liaison managers. *“...we’ve been reliant on the [liaison manager] to do that work. Actually we realize that actually unless Learning Services take a grasp of the necks and say, ‘no, we’re gonna do that and make it happen’, then it’s not going to happen.” [Corey, CG, Interview 1]* CGLSD operates one training budget that is funded by the other members of the group. They have standardised their cost data and monetised benefits when they evaluate to L5.

On the other hand, although attempts will be made to evaluate at L4, this was very much further down the agenda for CILSD, who expect that they may have to use estimation to determine attribution. They were not yet sure if they would be able to take an evaluation to L5 because of the structure of their organisation, where it is extremely difficult to collect cost data. This is mainly because Company CI does not have a central training budget but instead use multiple cost centres.

Collecting data at L1 and L2 is far less difficult since this usually occurs when the learner is attending the L&D event. *"Level 1 and 2 we've got nailed, because obviously we can control that at the time we deliver the intervention..." [Cory, CG, interview 1]* L3 to L5 are more difficult to collect, *"level one and two, it's all within the control of the department. Once you get up into, even into level three, never mind into level four, as soon as you get into level three, you're relying on other people in the business to give you certain data about people's settled behaviours."* [Carla, CI, interview] In both companies, stakeholders for the most part do not understand why Learning Services are requesting data that they do not traditionally request.

When Company CG first began implementing the approach, stakeholders were provided with information about it via half-day workshops (step 1: Education). For example, Chloe attended one of these when she was a trainer. In addition, key stakeholders (particularly those who are liaison managers) were asked and encouraged to attend the 2-day Foundation workshop. However, they still faced challenges in collecting data, *"...it's really hard work trying to get the much broader stakeholders in the [rest of the group] to understand why we're trying to do it the way that we are doing it."* [Cory, CG, interview 1] CILSD was just beginning this part of their journey and were still the only department within Company CI with persons who have undergone the ROI training.

Organisational culture change takes time but significant progress has been made at Company CG. The change in the organisational culture had become so embedded that when there was another restructure in late 2012/early 2013 in Company CG, CGLSD was informed that their budgets were being cut and all L&D initiatives had to show a clear ROI and link directly to the strategic objectives. Even so, Calvin does not have his immediate management's support (an outsourced company). Nevertheless, he believed that he could use the ROI concept to advocate for more resources, *"...I would use the ROI method as a tool to move forward with and try and put the next case forward."* [Calvin, Interview 2].

Drawing on Argyris and Kaplan's (1994) process, it could be said that during the Analysis and Action phases of implementation of the ROI approach (step 2: Sponsorship), the CG participants in this study acted in various roles. For the Analysis phase, Cory was a Target (when the approach was initially introduced) but quickly became a Change Agent. In the Action phase he acts as a Change

Agent and Advocate, promoting the approach to new L&D personnel at CGLSD and their outsourced partners/stakeholders. Chloe acts in the role of Target for both phases, while Calvin is a Target in the Action phase; he was not at CGLSD during the Analysis phase.

CILSD recognised that they have embarked on an organisational culture change. *"...I think that what I thought was that it would be a process, we'd apply the process and it would work. It isn't that. Our experience is, it's actually about a culture change in the organisation and that takes time. So it's a change in the organisation and we are growing with it, you know."* [Cynthia, CI, interview]

CILSD is a small department with less than 10 persons; therefore changing their own department's organisational culture will not be difficult. It could be argued, Cynthia acts in the roles of Advocate, Sponsor, and Change Agent and Carla in the roles of Advocate and Change Agent. The rest of the CILSD team are the Targets. They have embarked on restructuring their department by first getting all of the CILSD team trained in the approach and then changing their procedures and systems in line with the ROI framework. *"What we realised at that point is that it wasn't charts that you fill in, it's a discipline. And it's a quite a high level of intellect, that's probably the wrong word but you have to get that kind of appreciation. Its not just things, you know, 1 plus 1 equals 2, its much more of a, you know, 'really does that connect?' 'Can you really say that if you do this it will actually have that behaviour and how does that, if you're going to want that behaviour are you sure you've got that down in your learning outcomes?' That kind of link is, I think, a professionalism that takes people a while to acquire, I think. So, but yes we are applying it, much more, I think, than we realised."* [Cynthia, CI, interview]

However, CILSD do not have senior management support for implementing the approach. *"My problem, not problem, but my situation at the moment is that my organisation is not pushing me for payback information or statistics on our training. Very much the drive within our organisation is, 'training is a great idea; we want you to do what ever is necessary to do a great job with training'."* [Cynthia, CI, interview] Nevertheless, both Cynthia and Carla are internally committed to pursue implementing the approach because they believe as L&D professionals they need to prove ROI for some key projects. In addition, the approach could be used to bid for people's time. *"Trying to get their time committed to doing the training is quite a difficult one. So only yesterday I realised that using our ROI methodologies in the way that would link it to cash would put me in the best position*

to bid for their time." [Cynthia, CI, interview] This was notwithstanding the challenges that will be faced in capturing cost data, as well as L3 to L5 data.

Nonetheless, changing the wider organisational culture is a long and difficult process. As shown earlier, they have already encountered resistance from their finance department. Without senior management support it will be challenging for them to engage this department and other stakeholders (Argyris and Kaplan, 1994). Nonetheless, they have been able to engage the HR department by offering to share their LMS, *"...we need the HR data and HR are very interested in the fact that some of the stuff that they're doing very manually at the moment could well be managed with the LMS."* [Cynthia, CI, interview] In other words, they are seeking stakeholder engagement by negotiating mutually beneficial arrangements.

Even though they were just embarking on implementing the approach, CILSD had already begun to experience some organisational culture change. They now saw themselves as 'training consultants' and have also changed some of their daily practices. *"We've got a common language; we've got a common approach; we've got a common template that we use now, which defines all of our training and so on; and the learning outcomes and connects that through to the business aims. So we've put a lot of structural things in place which have been built on a basis of solid principles from the abdi qualification and also enabled us to have a common language to discuss those, that wasn't there before."* [Carla, CI, interview]

CILSD's online university provide service across the globe. Here, national cultural values will impact individual performances within Company CI since these values affect their emotions, attitudes, perceptions and behaviours (Hofstede et al., 1990; Taras et al., 2011). Therefore, CILSD will face additional challenges when they start to collect data at L3 from outside of the UK. Measuring outcomes at this level will undoubtedly be interpreted differently in some countries.

The team at CGLSD were seen as experts, who could provide an analysis of the business situation and whether an L&D intervention was the most appropriate solution. Their discussions began at L4, the organisation's need or opportunity. Although CILSD now saw themselves as training consultants, they applied the approach by starting at L2 and L3, then linking to L4. This suggests that they were still focused on their department's outcomes first, then how it linked with the organisation's objectives.

It was also depicted in the way that their other departments still saw them – as being there to provide an L&D event, after that department had already determined that this was the solution to their business need.

Both companies planned to use technology to improve data collection and analysis, particularly at L3. CGLSD created a new position in their management team to focus on technologies and reporting; *“...our technical capabilities are restricting our ability to move our learning and development activity to the next level and beyond”* [Cory, CG, interview 1] The person selected for this new position is expected to drive the improvement in their technical abilities. For example, they hoped to use mobile technology as an alternate learning platform and to improve their data collection. They can also see how this would improve access to their trainees.

CILSD had recently acquired their new LMS, as well as other new software. They planned to use their new LMS to collect data at L3, *“...to gather that kind of feedback from managers so that it's an email that pops into their inbox: it's a quick link with two or three quick questions to answer. We're trying to keep the learning outcomes that comes from each of our courses to maximum five and it's usually three, three to five, so that then we can actually then keep those contextual questions about settled behaviour to a minimum as well. Again, so not too short to be meaningless, but not too onerous on the person to give us the feedback.”* [Carla, CI, interview]

Interestingly, both companies believed that 360° assessments were a solution for collecting data at L3. Chloe's Coaching Project included a 360° competency assessment, which was to be rated by the trainee, his/her line manager, a colleague and his/her coach. However, this project was cancelled, as explained earlier. CILSD began working with their HR department to match job competencies with training needs, which will be matched to the learning outcomes of L&D events. They have begun discussing how to use their LMS to collect 360° feedback on the trainee's settled behaviour from the trainees, their managers, etc.

4.3 Chapter Summary

This chapter presented the three units in the corporate contexts: two for Company CG (Cory and Chloe, and Calvin) and one for Company CI (Cynthia and Carla). The findings were then discussed, which examined how the ROI approach was being perceived, how it was applied and the challenges faced when applying it.

Within this sector/context ROI was interpreted as an approach, a framework, a discipline that provided a basis for a common language among colleagues who were planning and evaluating L&D initiatives. There is a very high emphasis on planning initiatives using a detailed process. The approach was difficult to grasp and apply, as well as took long to implement. This was because it is difficult and takes long to change organisational culture, which was deemed necessary when applying this approach. In addition, data was hard to access and collect at L3 to L5.

More success was seen at Company CG, who had education (all relevant stakeholders trained in the approach), sponsorship (senior management support), aligned incentives (CGLSD was given empowerment to carry out their roles) and internal commitment (at senior management level). They also applied the approach in a structured way, abiding by the process outlined in the approach.

On the other hand, Company CI had just begun implementing the approach. Although they had all relevant staff in the LS department educated in the approach, they did not have senior management support nor were incentives aligned. Instead, persons within the company who believed that they had a responsibility to evaluate key L&D initiatives were championing the implementation of the approach (internal commitment).

Nonetheless, both companies shared similarities: they were using technology to help embed key data collection processes of the approach, there was standardisation across their L&D departments, and they had different perceptions of themselves – as L&D experts and consultants.

5 Health Service – Units and Findings

This chapter presents the units and findings for the health service context.

5.1 The Health Service Units

The UK's National Health Service (NHS) underwent a major restructure during 2012/2013, where Strategic Health Authorities (SHA), such as HN, were closed down on 31 March 2013. New Commissioning Support Units (CSUs) were opened on 1 April 2013. These units will support the newly formed Clinical Commissioning Groups (CCGs). Units A and B provide Hanna and Harriett's experiences applying the ROI approach. They were both part of the first ROI Foundation workshop in HN and were completing their Practitioner level qualifications at the time of the interviews. Units C and D are Hank and Hazel's stories. They were observed at Foundation workshops (separate events) during this study.

5.1.1 Unit A – Hannah, HN

Background

Hannah worked with HN for about 10 years as a manager for L&D and joined a CSU in April 2013. Before joining HN, she worked in another public sector organisation that was very focused on measurement and analysing data. This area grew quite rapidly in that organisation, particularly when using technology to collect and analyse data became the norm. Since she joined HN she has always felt *"...like I'm catching up with that thinking because that's what I've been used to in my previous work and I think that's where my passion started. ... So data allowed us to think, 'what's going on here?'"* [Hannah, interview 2]

Hannah recalled that in 2009, although her Trust had a good supportive training process, *"...you could tell the writing was on the wall that if you didn't say what training was doing to the business we were going to struggle year in year out to get budgets."* [Hannah, interview 2] Around the same time HN began asking its L&D practitioners about the types of support they needed and invited abdi to

present at one of their meetings. Hannah thought that HN was perceptive because following this meeting they began funding ROI training courses (at that time, the Phillips ROI Methodology™), *“...they could see the benefit, going as a whole region and I think it’s taken some time but I think it could pay them dividends now.”* [Hannah, interview 2 held in January 2013]

Perceptions and Interpretations of ROI

Her first interview was held with Harriet. Both participants recollected that their previous evaluation attempts could be classified at L1 and L2 in the ROI approach, though these were not carried out on all L&D interventions. However, Hannah disclosed, *“I mean we certainly would have done level 1 and 2, you know, the engagement process. Well, I say level 2, I say level 2 out of caution, how truly did we measure learning?”* [Hannah, Hannah and Harriet interview] Both participants agreed that these evaluations were not structured and they didn’t have a structured framework. *“And the robustness was let down by data every time.”* [Hannah, Hannah and Harriet interview] This was particularly true for mandatory training, where the focus was on ensuring that compliance targets were achieved. However, Hannah wondered, *“But does that change practice? We’ve got 90% compliance but is it changing practice? Are we ticking bums on seats, [or] are we ticking changed behaviour, and that’s what ROI does very well is change behaviour.”* [Hannah, Hannah and Harriet interview]

From the start Hannah realized that applying the approach would require the involvement of other members of her organisation. After attending the first workshop, *“... I kept thinking, “how can I use this?” It became clear very quickly; this is a whole team approach. I’m one little bit of a wider network. So I can go in there with my training head on but actually for the delivery and to know that level 3 was taking place and for me to get the data I wanted, I needed a whole wider team approach, which was beyond my accountability and responsibility. So I started to look within our organization, ‘who else could be trained on this? Will [HN] support it?’”* [Hannah, interview 2]

Applying the ROI approach

Hannah shared one of the projects she was working on where she used the ROI approach. The major restructure that was underway in the NHS affected a number of projects across the country. Fortunately, Hannah has been able to maintain her project. The project lead has also completed the ROI course and has been keen on seeing it to its completion. Hannah thought that the reason they have been able to stay with the project was *"...because there has been so much direct impact on patients and we could demonstrate that. And actually the process itself is telling us a lot about how we need to run the process in the future."* [Hannah, interview 2]

The objective of the project was to reduce the number of patients with a particular injury in a specific age group. It was linked to a top-level requirement and therefore had senior management support. The project team consisted of practitioner experts from a number of agencies who were focused on achieving this objective, however the project focused on one of these agencies to start with. *"If we could get this programme to work here theoretically we could get it to work across all of these [agencies]."* [Hannah, interview 2]

A key element of the project was a training intervention, which was managed by Hannah. The project team had identified that across the city the front line personnel for this agency were recording this particular injury in different ways. The training programme was to address this issue. It was pilot-tested and revised before being officially launched. Hannah was cognizant of her role, *"My role was training development practitioner; to try and make sure that the training element ran well but the wider project, I'm listening to them for their expertise and I think it's really important that's recognized because ... suddenly it's your project but it's not, it's their work, they have to own it, they have to influence it. So anyway, that really gave us a good lever to get all the practitioners on board."* [Hannah, interview 2]

The aim of the project was to evaluate up to L4, although Hannah concedes that theoretically they could have gone to L5. L1 and L2 evaluations were carried out at the training event and demonstrated that they achieved the outcomes targeted at these levels. To check L3, data entered in particular fields on their IT system was monitored. When the training intervention was just completed, initial observations of performance revealed that there was an increase in the data entered for the targeted fields. However, follow up observations at the 12-month point revealed that this had fallen. As a

result, Hannah planned to carry out a post evaluation survey to understand why. Early feedback suggested that this was due to the IT system not being user/practitioner friendly. L4 data was being collected from a stakeholder that is not a part of the project team, which has caused delays in acquiring this data.

Isolation was particularly problematic in this project because of the influencing factors that have emerged, particularly the national initiatives. Nonetheless, attempts were made to organize a control group but Hannah cautioned that this was only at the design stage of the training programme. *"...they [the control and intervention groups] were very far, on either side of the city and they were different areas, different clinical environments and they didn't mix. And from that we engaged the participation and the training content design based on the outcomes of what we evaluated from those groups."* [Hannah, interview 2] However, she added, *"I totally accept that for us to be valid and for us to really say, 'this project has changed this' we should really have a good isolation. But I honestly don't think we've got the resource to do it to the depths that we need to do it to."* [Hannah, interview 2] The option of using trend line analysis with the L4 data is a possibility she planned to discuss with the project lead.

Since learning and beginning to apply the ROI approach Hannah has changed how she handles L&D projects. For providers, Hannah would ask, *"...how do I know your training's working?"* [Hannah, Hannah and Harriet interview] She now asks for more references about who and where they have trained and the difference they have made there. This has resulted in providers asking more questions of her and trying to learn about the context where the training is to be delivered. She also added, *"... the evaluation has to be evaluated our way. They have to use our evaluation forms, they have to provide it to us within a timely space, and based on that evaluation they have to be prepared to tweak their programme. So it's not a case of them being able to take something off their office wall and think it'll be good enough"* [Hannah, interview 2] However, she does concede *"...you can only really do that on really large programmes because you don't have the resource to do it on everything, which is more the pity because I would rather run less with more."* [Hannah, interview 2]

Hannah explained her philosophy for pushing the implementation of the ROI approach at HN. *"I think as long as we can continue an approach 'we are carrying this out with them and not to them' I think you'll get engagement but if we came in and said 'we're doing this to you' I don't think we will get the*

culture shift.” [Hannah, interview 2] She recalled that her project team was not fully engaged until several meetings had passed, “...till they knew that I was working with them and not to them. That’s why I would say this is a change tool and it changes culture and it changes your involvement. Until they see you as part of the team I’m not sure if you’re fully there. But I think they do now. But that took a while and I worked with these guys for some years but there is that sort of professional credibility that you have to get over.” [Hannah, interview 2]

She shared an experience of how she begins to engage new persons. She visited a lead trainer, “And he said to me, ‘my training has been evaluated as great’ and I said, ‘how do you know it’s great?’ And it’s quite challenging to say that because he said, ‘what do you mean how do I know? are you saying that my training is not very good?’ No, I’m not saying that. What I’m saying is, how do you know it’s great? Other than them telling you, how do you know it’s made a difference?’ ‘Well, I’m not sure I can say that?’ ‘So how do you know it’s great?’ you know, so I said, ‘I’m not saying what you do isn’t in form and it isn’t doing the right thing but how do we know we’ve got the right people on the programmes to take back what you want them to do?’ So you start to sow a seed, right, you still not won them over at that point, you got to keep watering it.” [Hannah, interview 2] She believes the challenges the NHS is trying to overcome have aided the acceptance of the approach within HN. “As things got more challenging with cost efficiencies, wow what a great opportunity because it was at that point you have to say, ‘we could say by doing this we could save XYZ’.” [Hannah, interview 2]

Hannah believed that getting people engaged was one of the most challenging parts of implementing the approach but she would ask, “...‘why don’t you want to do that? Why don’t you want to know your training’s making a difference? Why?’ You know, so you have to be sometimes quite, what’s the word, challenging, really, be quite polemic, really, in what you give back. So, you’re happy, then, to spend X thousand pounds but you don’t want to know what the difference is?” [Hannah, Hannah and Harriet interview] However, she cautioned that to do this you needed to understand the kind of context you are working in. “What it taught me was, don’t throw ROI down people’s throats, change your language that it makes sense to them.” [Hannah, Hannah and Harriet interview] Hannah had to learn to communicate in the language of her target audience. “...try to use their world to demonstrate what it means. So, I have to get embedded into their world a bit quicker and go, ‘just tell me what you’re trying to do’ - which, actually, is a good question – it’s from ROI. ‘Okay then, tell me a bit about the challenges you’re having’, ... then you’re really getting to where they’re coming from, which

helps you then to translate into their language, into their world. That's what's really important."

[Hannah, Hannah and Harriet interview]

She also gave an example of how she had to change her approach to gain buy-in in her project. *"We had to influence and change understanding. Not everybody got it if I'm honest, so we had to change the way we approached it, but then what we did was we set up the programme so that we could measure. And the key thing was 'what are we going to measure to show that we're making a difference?' So, 'what was our key objective to achieve?' Okay then, 'how do we know we're doing that?' And then from that it's what we've measured subsequently, but getting those first two things sorted out was absolutely key."* [Hannah and Harriet interview]

Hannah's passion for data seemed to be burning as strong as ever since learning this approach. *"And I would say what this system's done is, data creates good dialogue but the method [the ROI approach] starts the dialogue, I would say."* [Hannah, Hannah and Harriet interview] She advocates using data to engage stakeholders. *"And I think if you can get your data you've got people engaged straightaway, you really do win them over with the data. ... as long as you're prepared to explain what that data means and provide a picture for them that changes their opinion to what you're trying to do."* [Hannah, Hannah and Harriet interview]

In one of the first group meetings for her project, Hannah presented the ROI principles, particularly the cost process, and a breakdown of the factors influencing the problem they were trying to address. *"And we thought let's add in a slide about what we're trying to achieve and why it's important, and what shocked us was how engaged they were with that slide. They'd not thought of the business of health in the same way as it was presented..."* The practitioners were getting an *"...understanding of why it's important. Because, you know, you ask yourself, 'do you want to be just told, or do you want to understand why?' And most people will want to understand why, and I think sometimes we get in the habit of just telling people to do something, but what the ROI information did was inform them of the why, so this is the how you have to do it."* [Hannah, Hannah and Harriet interview] She believed that sharing this data was instrumental in getting them engaged, *"...and it was just (snaps finger) got them on board. Because what we done is we brought the project to their practitioner knowledge and they were engaged because it made a difference to what happens to them on a day-to-day basis."* [Hannah, interview 2]

She strongly advocated using data wherever possible, *"... because it is massively powerful. We're adults and people like to see that sort of stuff and I think we should treat people as adults ... Data creates dialogue and dialogue creates solutions. If you've got data people will challenge it but then you've got a dialogue going and you can challenge each other's thinking going on it. Okay that's what the data is telling us so come on guys what is the solution to it, so once you've got that you got people on board with you."* [Hannah, interview 2]

A key point Hannah brought up was that the ROI evaluation *"... is not something that can be done from an isolated area in an organization, it's a whole organization approach, everybody is a player."* [Hannah, interview 2] She explained that her project worked well *"...because everybody that we had around that table brings something different to that project and everybody that goes out does their bit and brings it back in a timely manner, as far as they can."* [Hannah, interview 2] She added, *"When we've proposed something we have done it in a really informed way and without exception they've all said, 'Yes, we should do that.' But that's because it was informed and it's being informed by the outcomes of what we found."* [Hannah, interview 2]

Challenges to applying the ROI approach

Within her area in HN, project personnel and priorities are constantly changing. This affects many of the projects and especially evaluating them, where there needs to be repeated buy-in to the approach. *"So that can be a frustration, and, you know, just re-engaging them and they don't all buy in the same, so that can be a bit hard sometimes."* [Hannah, Hannah and Harriet interview]

Hannah found that if she is not involved in the design of the L&D intervention *"...you lose pieces of the jigsaw ... there's always, always going to be something missing that is quite key."* [Hannah, Hannah and Harriet interview] However, what happens in reality is that she is called in to evaluate a training event after it has already been designed. *"And you don't want to lose the opportunity of promoting ROI but neither do you want to do it a disservice, so I always have to say, well, I wasn't involved in the beginning and clearly this is what should have happened, you should have agreed*

what your ultimate outcomes were, what were the impact measures." [Hannah, Hannah and Harriet interview]

She does admit that people (mainly academics and general practitioners (GPs)) do tend to become defensive and then start to challenge the process. *"And because it was almost like you were questioning their content. 'No, I'm not, what I'm saying is, is your content making a difference?'"* [Hannah, Hannah and Harriet interview] In situations like these, she would carry out evaluations on what she can (usually L1 and L2). However, when presenting the results for these levels (which is in her remit as a L&D practitioner) they also ask for L3. *"... 'Well, what about the level 3 then that you talk about?' That's not my role, that's what I'm saying. Back to how the programme should have been designed, and actually back to you GP, how are you going to measure it?"* [Hannah, Hannah and Harriet interview] She added, *"...so there is something about if you are called into something, mid-way through something, there is a risk that if you don't tell them about how they should have done it, then the outcomes will never be full ROI outcomes. So, it makes it look a weaker tool."* [Hannah, Hannah and Harriet interview]

There were other challenges. The two main ones were *"...quality data in a timely way, because quite often I have to wait three months before data comes through, it's just the way the systems work outside of your power and influence; and, engagement of people that don't understand the process."* [Hannah, Hannah and Harriet interview] Collecting L3 data presents its own challenges. One is that as L&D practitioners, it is not within their remit, *"... even now, as much as in our head we want to do that, when you're working multi-agency you have to remember the constraints you're working within, and your right to that information."* [Hannah, Hannah and Harriet interview] There is also the issue of data sensitivity, *"Well, they may not want to share that with us. So, there is still limitations but if you at least design your programme to that end you can at least give guidance to those organisations what they can look out for."* [Hannah, Hannah and Harriet interview]

Another challenge is time. Her project ran for about two years, even though it was evaluated over a 12-month period. Hannah believed that the time clock for the evaluation exercise is really more than a year. *"...it takes a good few months just to get the thinking into gear for people to get on board with you. It's not until that point you can either start counting that year clock, ... we say an ROI is a year, it probably is from the starting point of the project...but actually you need several months before that*

just to get the project [team] to even want to do it, and that's the hardest." [Hannah, Hannah and Harriet interview]

A good support that is now in HN is mentoring from other ROI practitioners, although in the early stages this was not available.

Hannah reflected on her project, especially the L3 results that was initially rising then dropped off. *"If the system had been designed to be practitioner-led would we have had, what's the word I want to use, the requirement to roll out that training? ... I'm questioning whether we had to do that training at all."* [Hannah, interview 2] She also pondered about what she would do differently. *"If I went into another project like this now I would ask different questions. I would ask 'What is it that you want to achieve, and what is it that you can realistically change?'"* [Hannah, interview 2] Hannah also wondered whether she should have selected a subset of the target population they had studied.

She believed that the most successful parts of the ROI approach were better project management across projects, engaging people in a more appropriate way and advocating for getting rid of the barriers on data across organisations. Hannah reflected on her experience with the ROI approach. *"... hopefully, we're sort of the people that will just lay the pathway to make it easier for everybody following on, because every hurdle you come to you try and resolve, get over it, move on a bit more, hopefully, those hurdles are knocked down for people coming behind us, really. But I don't regret how long it's taken, it's frustrating it takes so long but actually I'm still learning, you know, and I think we will continue to for quite a while, really."* [Hannah, Hannah and Harriet interview] She believes that *"... agreeing a formal package of evaluation products and putting it all into one place"* [Hannah, Hannah and Harriet interview] would help future L&D practitioners brought up to speed quickly.

Going forward, training other functional roles in the approach so that they understand how people add value to the organisation is key to getting it embedded in HN. She highlighted: HR – *"...if this is around people development then actually they're a key influence."* [Hannah, Hannah and Harriet interview] Operations – *"But I think what has been massively influential for me at work is getting operational people trained up. Yes, so they understand the concept ...these are people like service improvement leads, they may be leading on specific clinical projects, there may be an audit, that type of role, but, actually, for the level 3 and above it's more relevant to those people because they'll be*

out there showing the change.” [Hannah, Hannah and Harriet interview] Data Analysts – “I think a very bespoke programme would be massively powerful. ... their role in that would be really important because in all honesty without them on board you’re stuffed, aren’t you, to be honest? You could try get the data yourself but what they do is help you understand the data.” [Hannah, interview 2]

She would also like to formalise data collection from providers. “So if we can formalize it and maybe this is what the new CCG will allow us if we can formally get that data, if it is required for contracts; we need to enhance the contracts to include the data.” [Hannah, interview 2]

Hannah had some advice for training practitioners, “... actually you should never start looking at your training from level 1, 2. I would always look at level 3 as a minimum now, because actually if we don’t know why, what difference we are trying to make, even at just at competence level, forget the business side at level 4, 5, above. If we were expecting somebody to change in the way they do something, be it a physical skill, a task, an attitude, whatever that is, then always, always as a training practitioner you should start at designing from level 3, your level 1 and 2 is the add on bit you do at the end just to show level 3’s working right. And I would say, from a training practitioner’s view... It’s your baseline.” [Hannah, Hannah and Harriet interview] She added “...I think until we get that level 3 embedded in our processes, that level 4 and 5’s always going to be more challenging to achieve. I’m not saying it can’t be done, it definitely can be, but it takes energy and effort much of which many of us don’t have, and time, anymore, because it is timely, it takes time to do. But, actually, we should never apologise for checking someone’s competence...” [Hannah, Hannah and Harriet interview]

At the time of the first interview in May 2012, Hannah shared that the emerging changes in the NHS was a great opportunity for the ROI approach. “... for the future we would hope this is a fundamental way of working, and I think if the health service is really, really keen on cost effectiveness, efficiency, which is what we should be, you know, competence, effectiveness, efficiency funding, then as they’re drawing up these new structures they should instil this as practice. You know, what a great opportunity, it’s a watershed moment for the NHS I think, you know, ... what a tool to help that to happen. So, it’s a great, as organisations are changing and emerging it’s a brilliant time to try embed something.” [Hannah, Hannah and Harriet interview]

She also added, *“as we’re merging with different agencies, which the government expects us to do, we’ve got to work in a more multi-disciplinary, multi-agency way, then actually we’ve really got to think about, you know, how do we share our methodologies interspersing with their methodologies, but at the end of the day it’s about measuring impact, and it’s what it costs, and training and development’s got to be there.”* [Hannah, Hannah and Harriet interview] By the time of the second interview in January 2013, there was a position posted for a Business Case and ROI Lead. Hannah was quite excited about this. *“I was really impressed by that so I just thought that’s a really good sign that I think they’re taking it very, very seriously, that they’re putting people into those roles, it’s just how now? My only fear is that they don’t hope that person has got all the answers because actually the answers come from the whole. That’s what I’ve found anyway.”* [Hannah, interview 2]

5.1.2 Unit B – Harriet, HN

Background

Harriet has been working with HN for around 30 years in a variety of roles. Her current role at the time of this study was at a strategic level and included workforce planning, training needs analysis, competency development, formal and informal training. She worked closely with a university and two colleges in her area to conduct the training required for her learners.

Prior to her introduction to the ROI approach, Harriet and her team carried out evaluations using *“...the normal scientific ways of evaluation, so there was the basics around student feedback; we had focus groups and discussions with managers, so we got ad hoc manager evaluation, but it wasn’t very structured. In terms of internal QA [quality assurance] the university programmes are extremely thorough and they just follow the standard university format. But in terms of evaluation techniques, we might have done some pre and post scientific approaches, but nothing much more.”* [Harriet, Hannah and Harriet interview] She explained that she was responsible for all of the in-house evaluations and had a standard template that was followed. For the most part this included immediate feedback from learners about the programme they had just participated in.

A number of her programmes involved study days, which did not have a component for testing what learning had taken place. Harriet conceded that their templates were *"... reasonably okay and sometimes we did sort of have level 3 intentions in there, but for the most part it was level 1."* [Harriet, Hannah and Harriet interview] Formal programmes that were carried out in partnership with other organisations usually resulted in them getting copies of the feedback forms and results of tests, depending on the partnership agreement. *"If we'd commissioned or paid for the programme, we'd always get results back. So, we'd get level 2 outcomes but not the detail, not in any great detail. So, we were sort of definitely doing level 1, some of level 2, but we had a long way to travel."* [Harriet, Hannah and Harriet interview]

Perceptions and Interpretations of ROI

She recalled when she was just introduced to abdi in 2009, when they were using the Phillips ROI Methodology™, *"...we suddenly thought, yes, we've been doing evaluation and then when we got into the training we thought, no, we haven't, we think we have. So, that was a really interesting learning curve."* [Harriet, Hannah and Harriet interview] She explained that *"...it's that bit afterwards about what happens when they leave, when they finish programmes of learning, what do they do differently? And I think that was the big wakeup call and we suddenly realised we've not been doing that that well."* [Harriet, Hannah and Harriet interview]

In those early days the methodology was presented as an approach for evaluating the impact of training. However, Harriet explained that *"...we flipped it completely and used it in projects, so we've had to flip some of the meaning of the level 2. It's not about what learning is, it's about what do you need to know about to be able to get that."* [Harriet, Hannah and Harriet interview] Since Phillips' methodology had begun in the corporate context, the language didn't suit their context very well. *"...it wasn't applicable to our context so we did change quite a few of the initial tools that were presented to us. But that is still a work in progress to be honest with you, so I wouldn't like to sort of identify anything specific."* [Harriet, Hannah and Harriet interview] However, Harriet does recall that the V diagram was not taught early enough. Also, the student support was not as strong as it is today.

Harriet candidly shared her experience learning the ROI methodology at the 2-day workshop. *"Well, from the early days it was learning the language and just, in the early stages you felt like you'd understood it and you'd perhaps get to the end of one session and you'd think, right, I've got it. And then you'd go into the next session and you'd think, oh, no, I'm not sure that sort of quite fits. Did I have it right? Did I get it right? And you sort of go from highs to lows, highs to lows, and I think by the end of day two I came out thinking, I'm not sure, I'm not sure I've got it."* [Harriet, Hannah and Harriet interview] Her advice to new trainees was *"... to take on a very small discrete project for your assessment, not for the work you're doing, I think you should, you know, you should be looking at; practice it small scale and build up and you'll be on a winner."* [Harriet, Hannah and Harriet interview]

Applying the ROI approach

Once she had learnt the methodology, she attempted to apply it as it was presented but found that difficult and soon found other ways of applying it. *"So, whereas before I was going in touchy feely, drip, drip, drip, slowly, slowly, trying to get my level 1s right, trying to get my level 2s right, you can actually start to look at the framework and work out what levers, what buttons am I going to press, what do I need to press within that group of staff, and maybe this operational group of staff here. So, we have to sort of use different ways to go in at different levels. So, you might not come in and see something in a very sort of structured manner, ... but, you know, you've got to actually just use it quite, sometimes quite in an abstract way."* [Harriet, Hannah and Harriet interview]

Harriet shared an application of the ROI approach to one of her projects. The project is a NVQ Level 2 vocational education programme that was offered to existing employees at HN. She planned to evaluate it to L5 after she realized that they had the data that could be inputted into the ROI formula, *"...we didn't actually think we'd be able to go up to level five, but having got this data, I think we can go to level five, in terms of the claims we make for productivity."* [Harriet, interview 2]

Harriet shared how they evaluated this project. In the first instance, they had a baseline point that was called L0. For her, L0 was an assessment of the learners' academic qualifications and a screening of their literacy and numeracy levels to determine their level of understanding as they enter the programme. *"So you might get a student who's got a GCSE grade C in English or Maths, but*

they might come out at entry level three, ... GCSE grade C is level two. So they might come out as much as two scores below their certificated achievement..." [Harriet, interview 2] This sometimes happened with students who had gotten their qualifications many years prior to embarking on the programme. The learners are then offered the opportunity to up-skill their literacy and numeracy levels, as part of the Skills for Life government initiative.

The L1 and L2 evaluations were carried out at the same time by using a combined online questionnaire that covered the learners' reaction to the programme as well as the new knowledge gained. *"...I think it would be difficult to send a level one questionnaire and then a level two, so we've combined them on to one evaluation. So at the end of programme, they do the level one, level two, and we do an exit questionnaire as well, separately, to find out where their first post is."* [Harriet, interview 2] She explained, *"So, say, for example, on the reaction questionnaire, you know, 'would you recommend it to others', you know, 'is it appropriate for your role?' Yes, absolutely, we've used those questions as they are and lifted those from the template, but we've combined them with 'how much new knowledge have you learnt on this programme?' 'How much was directly appropriate to your role?' So those have been lifted again, but put into one questionnaire so the students aren't overburdened with lots of different ones."* [Harriet, interview 2]

About three and six months after, they send a follow up revised questionnaire to those learners who did not get a job straight away, to ascertain if there was any change in their employment status. There was also a student survey, *"...that's more extensive than that, in terms of, you know, 'did you get the right mentor support', and 'have you got any issues?' 'Have you struggled with the financial side of the ...[programme]?' We ask a wide range of questions, actually, at level one."* [Harriet, interview 2]

Harriet and her team tracked the learners' performance on the programme, including their grades, as part of the L2 evaluation. *"This is new to what we used to do in the past. We didn't ever track how much was new knowledge, so 'was the student learning anything new?' We knew what the outcome was. We knew what grade they were getting, but we didn't know whether it was new to them...."* [Harriet, interview 2]

They also tracked the learners' attrition at this level, as well as their behaviours and attitudes. *"So every ten weeks somebody sits down with them and looks at their attendance, so we know what the level of sickness absence is, and we report it on that. We know what their sort of, if there are any on-going problems that have been documented, so if there's problems with attitude, and the motivation to actually get on with it."* [Harriet, interview 2] This helped to identify learners who were struggling so that one of the facilitators could investigate to determine the issues and try to resolve them collaboratively with the learner or other affected parties. In some cases, students who had issues were given action plans. *"So we've got documented action plans for students that have struggled, and we don't get a lot of those, but you might get between one and four, or four or five a year, where there's had to be some level of action taken with them. So we do actually respond to that, so we sort of, red, amber, green, RAG rate these students in terms of progress, in terms of attendance, in terms of issues, pastoral issues, etc. So that works, that seems to work quite well."* [Harriet, interview 2]

At L3, learners who have completed were assessed on *"... what are they now doing differently than they were before? There's things that you can look at, in terms of, like their career progression. There's things that you can look at in terms of tasks, as well, but we haven't gone to that level of detail. All we've said is 'are these learners in jobs, so are they applying their learning?' So the assumption is, yes, they are, because they're working."* [Harriet, interview 2]

Harriet disclosed that they had data for L4, including cost efficiency savings and productivity output for the learners. This led her to realising that she could calculate ROI (L5).

The ROI approach includes isolation techniques that attribute a portion of the programme's impact to the programme. At the time of the interviews, Harriet thought that using a conservative estimate would have been her best option although she believed that if the learners were new to the organisation, the programme was *"...wholly responsible, I think, for that level of productivity, and because of the way that those students have been trained."* However, the programme she was evaluating involved existing employees. *"You might want to take a pragmatic approach, and I haven't done my level five calculation, as you know, because we've not come to the end of the project. So at the moment, I'm going to be in discussions with [...someone in abdi] and look at the data that we've got and how we interpret it, because there's two ways of looking at it. I think the confidence*

level is high, and I think we could probably apply something like, personally, I feel, like a 95% confidence, because I think it's a bit arrogant to put 100% on it. But, I think we can apply a 95% confidence rate in the method, and the fact that for these people the data is correct." [Harriet, interview 2] She admitted that this type of project/programme is very difficult to isolate *"... because it is so interwoven and integrated. You might want to put a 50/50, so that you get a really, really conservative estimate value. ...Yes, it's a discussion I've got to have. I mean, I'm completely novice to this area and I'm learning all the time, so I think there's different ways of looking at it. So in terms of isolation techniques, we'll probably have to come back to that because we haven't nailed it fully, because we've not completed the project."* [Harriet, interview 2]

They were able to collect individual learning costs, which included age and qualification-related course fees. Funding was available for some age groups, while learners with degrees received no funding. Harriet explained that they used the cost template from the ROI approach *"...and so we've based a lot of the work we've done on the sort of Kaplan and Porter model, and we've looked at identifying the time spent on each process..."* [Harriet, interview 2] (The Kaplan and Porter model she referred to was the time-driven activity based costing model (Kaplan and Anderson, 2004).) The other costs were categorised as fixed, semi-variable and variable costs covering all phases of the project, i.e. analysis and planning, design and development, pilot group delivery, on-going delivery and evaluation.

Harriet shared that this project used productivity outputs, which could be monetized. This is in keeping with the national organizing body for this programme, *"They've used productive outputs, in terms of money, so I thought that that was perhaps the only thing we could monetise."* [Harriet, interview 2] Other areas of benefit that could be monetised would be too complex.

Harriet identified a number of barriers in her project:

Time – *"...I think the good old time barrier, that it does take time to collect. However, we got quite slick at going on to the recording system and downloading the snapshot, but then we had quite competent staff. If I didn't have competent staff, in terms of IT, and being able to collect the data as instructed; it would have made a big difference."* [Harriet, interview 2]

Expertise – they were developing and learning the approach as a group, “...whilst we were also trying to implement the project, so the fact that we were learning as we were going along. We weren’t the experts, but is there anybody that would have been an expert in evaluating the health data and education data? I don’t know. I don’t know, so it was just the state of play, really, for ...[these types of projects], or for applying the ROI.” [Harriet, interview 2] She added, “It’s just really building up that level of confidence, and to know what you’re doing is right. It just takes some time to do.” [Harriet, interview 2]

Data – “I think it’s just the lack of external data that’s out there. I don’t think there’s anything that’s very specific that supports our needs, really. Data collection is really, really bad in that.” [Harriet, interview 2] Sharing data between providers is an area that needs improvement as well, “...if we didn’t have it [support from their university partners], reliance on other data collection methods would have been hideous, you know, particularly for getting that level zero data.” [Harriet, interview 2] Even with their support, return on the end-of course questionnaire was less than 50%. Harriet shared that the university implemented new measures to mitigate this low return by issuing the questionnaire at the end of the course but before the certificates were sent off, “...so the students can’t be signed off as complete until they’ve done their evaluation.” [Harriet, interview 2]

However, Harriet believed that her organisation’s role as one of the funders gave them a legitimate position to get access to the required data. She also thought that being able to use the university’s electronic portfolio enabled them to collect accurate data. “... so we were able to stick to the ROI rules, i.e. only collect data that’s already available and easy to collect. I think the fact that they had, that there was a willingness on their part, as well, to collaborate and provide that data. Not all providers are quite as accommodating, so they actually did provide regular data for us, where we asked for it, and then also because of the recording system, ...we could go in and look at the live data, as well, so that was certainly an enabler.” [Harriet, interview 2] Two of the university’s employees attended one of the Foundation workshops observed, although they did not complete the assessment, “...but they’ve been on it, so they understood about the programme.” [Harriet, interview 2] Harriet believed that both organisations had complementary aims and benefited by acquiring better data quality for their governing bodies.

Challenges to applying the ROI approach

After embarking on the ROI workshops Harriet observed changes in her organisation. These related to project management, *"You've got to go in very, very prepared, haven't you? ... I think it just radically changed the way we think about the way we manage projects, the way we start looking at training, and ... it's really started to change the way we think."* [Harriet, Hannah and Harriet interview] She elaborated on this last issue further, *"I think the biggest thing for me was it started to raise more questions, so the first time somebody asks for a project or puts an idea forward you do, you start challenging. So, the first thing you think at is, 'what difference is it going to make? What's the, you know, what's going to be the cost benefit?'"* [Harriet, Hannah and Harriet interview]

The ROI approach includes a number of tools for practitioners to use. Harriet felt that these tools *"...have really, really worked for us. So, in an instant, once you start using these tools, I mean the methodology's quite complex and takes a bit of getting your head round, but once you actually get your head round it and you've got your standard tools that you use, you can actually cost something out in very rough terms within five or ten minutes, and make some quite sort of reasonable, you know, reasonably grounded decisions to start to talk it through a little bit better."* [Harriet, Hannah and Harriet interview] These tools helped her to assess projects, once the data is at hand, *"...how much is it going to make a difference? What's it going to cost? Who's going to be involved? Have you considered the full costs? What's going to be the impact? What's going to be done differently? So we have a, we almost have a standard patter that we sort of work through."* [Harriet, Hannah and Harriet interview] Learning the approach *"... has given us the confidence to be able to challenge because we actually know that it's a workable method, and we've got lots of people to lean on as well, to say, 'what do you think about this?' So, it's given us that confidence to be able to change."* [Harriet, Hannah and Harriet interview] Although she admitted that this confidence was recent, *"I think we've only started getting the courage of our convictions over the last six months."* [Harriet, Hannah and Harriet interview held in May 2012]

Harriet described how in the earlier days *"...we tended to look at levels 1 to 5, and we almost tried to work through it at a linear process, but now we're getting smarter at going in and sort of looking at level 3 first, and saying to people, well, 'what's good about what you do?' 'Tell us about what you see the practice as being?'"* [Harriet, Hannah and Harriet interview] She expanded on this, *"And you can almost sort of work in there and then go back to, well, okay, 'if that's what we think good practice*

is, how do we know that?’ And, ‘how many people do we see who are the role models?’ Or, ‘have you got any baseline data to say where these people came in at?’ And you can start going back to your sort of pre, you know, your level 0, if you like.” [Harriet, Hannah and Harriet interview] She also noted that what her “...commissioners wanted from us was to know level 3, ‘what do actual practitioners do differently when we’ve invested this money in sending them through this training programme, just tell me what they do differently?’ ‘What are they doing for patients?’ ‘What’s better?’ And that was actually what they wanted to know.” [Harriet, Hannah and Harriet interview]

Harriet shared that now they evaluated in more depth, “...so we didn’t have the robustness of data, so it was quite light touch, if you like. And in terms of level four, yes, we had costs, but we didn’t drill down to the level of detail, and I think we’re far more financially aware, having gone through the ROI programme.” [Harriet, interview 2] She added, “...I think in terms of, as a unit, have we developed? Of course we have, and you know, we’ve got that ability, but we’ve got a bit more business savvy through doing it [the ROI course]. We got, obviously we’ve got slicker processes, so, yes, of course it’s made a difference to us.” [Harriet, interview 2]

Harriet recalled some challenges she faced while trying to implement the approach. Her finance colleagues would “...say, ‘done that, when I trained I know what ROI is’”. She agreed that they might know how to calculate ROI but not necessarily used it in the way she had learnt. Therefore, “...we’ve learnt to talk about it in a different way, but use the language of the ROI training, quite consistently, I think.” [Harriet, Hannah and Harriet interview] She conceded that these people were crucial stakeholders, “...if you influence these people and get them on board they’ve got the data.” [Harriet, Hannah and Harriet interview] However, she also made an interesting observation about the type of data available, “...one of the biggest challenges we found when we came into ROI, and I think all the projects have all struggled with this, is that we were made, it was made clear to us that there were standard values out there; there was data out there that was accessible that would help inform your project. Well, actually, when you go to it, there might be some data there but it’s not, the specificity isn’t right, it might not be the right context, it might not be deep enough, it might not be detailed enough, and that’s where we found the biggest problems.” [Harriet, Hannah and Harriet interview]

Harriet has applied the approach to very complex, multi-year programmes and has had to defend using the approach to stakeholders at various levels. “We’ve had deans of the universities who have

rubbed the methodology because it's just Kirkpatrick, and this is the sort of thing you get, but actually now we can sort of say, 'well, actually, no it's not, you know, it brings in a lot of methodologies, it's a multiple methods approach... and it's a very robust method that we work through'. So, I think it grows you, you know, it makes you stronger..." [Harriet, Hannah and Harriet interview] She thought that they got this kind challenge because *"...healthcare research is rooted in scientific principles"*. [Harriet, Hannah and Harriet interview]

Applying the ROI approach has also encouraged them to look at both tangibles and intangibles *"...we've done a lot of qualitative research discussions as part of the process. We've done a lot of practice development, practice developments that wouldn't have really happened in the same way without the sharing and the networking that we've had. So, it isn't just a financial technique, which I think sometimes people see. It's not just Kirkpatrick's level and just paying lip service to that, it's a very, very much more detailed process."* [Harriet, Hannah and Harriet interview]

The health service context they work in has its own challenges where change occurs quite frequently. Once they have *"got something right it's, you know, it's time to reframe it and relook at it ..."* [Harriet, Hannah and Harriet interview] This is coupled with the variety of levels of management who needs to be communicated with. *"So, we've got a big challenge, really, as to how you talk to all of those different levels and get them to understand, and I think this is where we're battling with ROI a little bit."* [Harriet, Hannah and Harriet interview] Notwithstanding, Harriet has prepared interim reports and distributed them among key stakeholders. *"I think that the early indications and the early responses to the work has been very positive, but as I said, it's not been widely sort of distributed across the networks. For some of our managers it's too much information. They want the high level."* [Harriet, interview 2]

One of the benefits Harriet saw in using this type of evaluation approach is seeing the difference in the outcomes of the learners on her project. *"...being able to see how you've moved somebody from A to B, and actually a long way further beyond that. And through doing these investigations we've seen that and we've got some fantastic case studies and examples of how it's made a huge difference, both sort of personally and professionally, and for patients."* [Harriet, Hannah and Harriet interview]

Harriet remembered how in the first project she evaluated using this approach, *“... it really did play a significant part in actually helping us to understand what we actually wanted our registrants to do, and what we wanted them, what part in the service did we want them to play, and, what was essential?”* [Harriet, Hannah and Harriet interview]

With this new knowledge and way of conducting evaluations, their senior management has taken notice. *“So, you know, they started to sit up and listen and there’s a lot of things have been changed because of the report [her first evaluation project], because of the evaluation methods, and because we’ve been able to show them that we’ve made a difference. You know, we’ve managed to sort of increase productivity, train people over a shorter time, because we’ve improved our data. We’ve used existing systems of electronic recording systems, and all of this has really, really helped in a way that people move through the system.”* [Harriet, Hannah and Harriet interview]

As the approach gained popularity in HN, Harriett was concerned that since the approach leads to a ROI percentage, projects may be pitted against each other. She hoped this would not be the case but shared how it could be possible. At the beginning of a project *“...we can say, well, actually, we’ve costed this through and we’ve got very strong indications to say that there’s going to be a positive return on the money invested. And that’s the most important thing, I think. ...So, then I’m just thinking in terms of competitive, as long as you’re sort of demonstrating what the likely benefits are going to be, hopefully it wouldn’t be just, well, [Hannah’s] going to get 15%, and [Harriet’s] going to get 25%, let’s go with her initiative.”* [Harriet, Hannah and Harriet interview]

Harriet reflected on her experience since learning the ROI approach. Their data collection and analysis had improved. *“Yes, so we’re really getting a lot slicker at using the data.”* [Harriet, Hannah and Harriet interview] Also, she believed that learning the approach has improved their business skills. *“... if you want it in a nutshell it’s really sharpened our businesses acumen, ...in a, you know, a massive way.”* [Harriet, Hannah and Harriet interview] She added, *“We thought we were reasonable managers...and it’s ridiculous that there are certain things that you just look at and you think, ‘why weren’t we doing this before?’ Because, actually, it’s common sense.”* [Harriet, Hannah and Harriet interview]

She candidly shared some of her own challenges in applying the approach. *"It's very, very hard, yes. For me, I mean the tools I use, the measurements I use, frames of reference, things have changed a little bit. I always thought, you know, if you could prove a cost benefit, you know, where you've saved money in terms of skill mix that that would be okay to put in your ROI, but I'm told it's not, it's just a cost-saving. And so I mean that was something I learnt only a few months ago, and, you know, so there's plenty of Eureka moments that happen and... So, I think it's going to take quite a long time, and I think we just need to keep doing it, really."* [Harriet, Hannah and Harriet interview]

Nonetheless, regardless of the changes she believed that *"...however fast things are moving you somehow need to be able to leave a footprint. So, there needs to be some way that you can sort of have an anchor, if you like, so you've done this much and you've anchored it down, closed it off. Then moved on. I haven't won that one yet. I think that's a challenge."* [Harriet, Hannah and Harriet interview]

Evaluating healthcare investments is not just one-sided. *"...we have to report on the financial and the efficiency side of it, but healthcare is absolutely focused on the quality side, so what has that meant for that student, what has it meant for their area of practice? What's it all about? I think there are some interesting stories that could come out of that that would strengthen the ROI message."* [Harriet, interview 2]

5.1.3 Unit C – Hank, HN

Background

Hank worked with Harriet in one of the units overseen by HN. He completed the ROI Foundation award in 2012. Prior to joining HN he ran projects in another organisation and later managed a department within a social care charity. *"I ran quite a lot of projects, or campaigns I suppose you'd call them ...looking at sexual health, mental health issues, substance abuse, crime and safety and things like that. ... I'd never really done any with a project management framework or model, essentially."* [Hank, interview 1]

He shared an example of one of the projects he worked on, where he worked with a number of organisations including the police and city council on a crime and safety initiative. The project was awarded funding following a successful bid, *"...the people that gave us the funding wanted to see the reports to see what difference it made, so we were keeping tabs in terms of outcomes to feedback on that."* [Hank, interview 1] He explained, *"the money would come in and, 'okay this is what we want you to do, we can support you to do this and this, how you do it now is now up to you, this is what we want at the end of it.' The message was to try to go out and get that really. ... so the whole year of that project was focused around doing what we said we were going to do and making sure we recorded it properly."* [Hank, interview 1]

Hank now worked on a number of projects, where *"[a] lot of it is to do with sort of facilitating the money and the materials to support the Trusts and the colleges in terms of the learning programmes for level 2 and level 3..."* [Hank, interview 1] These are NVQ levels. They also carried out general workforce development in their specific field, *"...so there is lots of projects, lot's of evaluations, there is an on-going web project in terms of interactive programmes we've got that are used by people all over the world really. It's quite a varied role..."* [Hank, interview 1]

Perceptions and Interpretations of ROI

Hank has an undergraduate degree in history and a postgraduate degree in medieval history and Latin. He candidly shared his experience learning the approach at the 2-day workshop. *"I found the workshop very hard because, obviously it was new to me as a way of looking at things, and it was very intensive, so it was long days, and your brain, there was no real let up, your brain was on the go the whole time and personally I, I've never, having never done something like that before. It's a much more scientific way of doing things I think is probably a good way of describing it and I'm not, I'm not, I mean my university degree was in history and thing, I've never really had that kind of view on things so I find it challenging because of that but I think I got it in the end."* [Hank, interview 1]

Immediately after completing the two days, Hank developed good habits to embed the new knowledge he gained and for completing the assessment. *"Well I made sure that when I got back to the office, whenever I could I looked at it every couple of days and did a bit of work, I didn't do it [the*

workshop assessment] all in one go, I kind of did a bit every couple of days just to kind of keep it in my head and keep refreshing it really.” [Hank, interview 1] He discussed his assessment with Harriet and subsequently completed and passed the assessment. He frankly shared, “Depending on your background, it’s hard work, it’s hard to get your head around. I found it really hard. ...but when you get into it its quite logical and it makes a lot of sense” [Hank, interview 3] Hank did not have plans to complete the 3-day workshop, the Evaluator award, as yet. “But never say never. I think for the role I have at the moment the bit that I’ve done is perfectly suitable.” [Hank, interview 1]

Hank felt that although the approach may initially seem to focus on financial issues, once there is an understanding of the whole approach “*there is a financial value that can possibly [be] ascertained but it’s not the be all and end all.*” [Hank, interview 3] He felt that using the process (particularly the Needs and Objectives and asking ‘why?’) helped by “*...stopping for a minute and looking at how will we do it, what are we trying to achieve along the way ...*” [Hank, interview 3] He believed that the approach, “*...shows the point of why you’re doing things far more, and I think using that as a way of working is probably a better way of doing things because you’re constantly looking at why you’re doing things and whether that’s necessary and what works at the end of it really.*” [Hank, interview 1]

Applying the ROI approach

Hank’s assessment was prepared around a project he was working on. The project was the provision of a learning programme and a study day for a specific group of employees in HN. This group provides key support to colleagues who have been newly appointed in their roles. Although Hank had organised a number of these study days, he had not been able to attend one until 2012. “*So it was useful for me just in terms of the context of the project just to have a look at that, but it was quite interesting as well because of the, out of the delegates it was quite a good variety of people. ... So there was a real mix so it was quite interesting just to kind of link the context and give me an idea of what we’re looking at really, it’s always going to be a lot more complicated than the sort of simplistic thing you put down on the project plan really.*” [Hank, interview 1]

The first study day he planned to evaluate would be used as a pilot group to test some of the learning tools (best practice templates) he was developing. A second study day was planned for the first

quarter of 2013, when a full evaluation on the whole project could be carried out. This would include an evaluation of the study day, the learning covered on that day, as well as the best practice templates used to support the learning. Hank also hoped to include a wider selection of persons; those who used the templates but did not attend the study days. However, he admitted that this might be difficult since he was not sure if he would be able to make contact with them.

Since learning the approach, Hank now examined each aspect of his project in more depth. *"...I'm constantly looking now at trying to make sure that things are phrased correctly and there is a clear reason for everything that we're attempting to do within the project and that it all links together, whereas before you'd always go out with that intention but you'd never, I don't know, I don't think you're probably as strict as you are now in terms of making sure that it follows through..."* [Hank, interview 1]

Hank found the Needs and Objectives tool (see Appendix 2 – Assessment Templates, Needs and Objectives) particularly relevant. *"I like the Needs & Objectives... I found that the hardest bit but I think it is definitely the most relevant because I think the way of just linking it all together and following it through in a much more logical way, and I think all the things about how you're going to get that off was relatively easy at that point."* [Hank, interview 1] He candidly shared that during the workshop he had difficulties with identifying whom he was evaluating at the different levels but worked through this with the workshop facilitator. This experience changed the way he worked and improved his project management skills, particularly *"...planning properly from start to finish on projects has probably been the real change...what are the steps along the way..."* [Hank, interview 3] He described his plans for the different levels:

L1: Hank planned to use questionnaires, via Survey Monkey, where possible and *"...possibly other email and phone and web-based things will be the way to go because its a big reach and there's lots of people, they're very busy, its not the sort of place where you can go and see people or anything like that, its giving them a short easy way to give information to you in a very quick and convenient way for them is the way to go I think..."* [Hank, interview 1] However, on study days paper evaluation forms (for L1) were used.

L2: The delegates on the study day got a workbook that they completed throughout the day. *"It's not really something you can mark because a lot of it, it tells you on the next page what sort of things you could put down but it will be specific ideas and feelings that you have as a person about what you've just read and things, so there's not necessarily a right or wrong answer. Obviously there is, but it's not a strict thing. So, how do we evaluate that is something to have a look at, as well, and can we evaluate that?"* [Hank, interview 2] Hank shared that there had been discussions around grading the workbooks or creating an online survey *"...something to email them within a month just to say 'to get your certificate, perhaps, maybe you have to just complete this survey.' It's common sense questions but just make sure they got the gist of it, almost. Maybe that's the way to go."* [Hank, interview 2] However, this was still being clarified at the time of the interviews.

L3: this included a target that 90% of delegates *"...make positive changes to practice within six months, which may be something as simple as using our best practice templates that we provide them and to follow that sort of guidance, really."* [Hank, interview 2] Hank planned to assess this via follow up surveys or phone calls, which would also cover assessing that 90% of delegates avoided repeat work and provided support to the targeted colleagues who were *"...in need of retraining or seeking assistance... and we make them feel confident and competent from the start rather than them having to constantly come back and ask questions..."* [Hank, interview 2] The delegates have their own CPD learning logs, however, Hank did not think *"...at this point, we will need to ask to see those, their learning logs and their reflections on it because that's for them. The knowledge that they're doing that, I think, and they feel comfortable doing that would be fine for us, really."* [Hank, interview 2] This would be conducted about three and six months after the delegates attended the study day.

L4: these objectives were affected by changes in government legislation regarding the colleagues that this group of HN employees supported. Therefore, the objective could no longer be to help these colleagues move through their training programme quicker to the same or better standard. Hank was examining how to re-frame his objectives for this level at the time of the interviews.

Challenges to applying the ROI approach

Hank admitted that while the delegates' feedback on the study day indicated that they were engaged, getting engagement from other stakeholders was challenging. He shared that his unit worked with some of the stakeholders on other projects and hoped that they could convince them of the value of this programme, *"so maybe we stick that on as an agenda item early in the new year and say this is what we're doing, this is how we're going to do it, we need your support on this, we need you to go and talk to people who have an influence on this because it's really important and this is why. So, that's potentially how we look at that, I think."* [Hank, interview 2]

One of the main challenges Hank also faced was the changing role of his delegates. He gave an example. *"Some of the colleagues, we've just had some of the colleagues we worked with on some of the meetings that we have. We have four meetings a year for one of the groups and one of our colleagues started the issue in the meeting. By the time the second meeting came round, her job title had changed and she'd been moved to a different role so she couldn't do it but by the time the third meeting came round she had changed to something different but she did fall back under it again. It's like that all over the place so it's really difficult to keep track of what people are, where, what they're doing, because their jobs take a long time to fit the various funding cuts and things like that."* [Hank, interview 2]

Having Harriet on hand was very beneficial to Hank. In addition, since they used elements of the approach in most of the projects this helped to embed his learning, *"...it means I'm constantly doing bits and bobs of it really ...every now and again, talking to someone else who knows about it, again talking out loud makes you think properly I suppose...vocalise your thoughts instead of things bouncing round in your head."* [Hank, interview 3]

Hank planned to evaluate each cohort of delegates that participated in the programme, i.e. those that attended a study day. *"These certain things we'll be able to judge this on, and whatever the results we're not going to be able to pin down to just this but we can get a vague idea through surveying what the general sort of feedback of the work we'll be doing will be and hopefully that can benefit down the line, and if the ...[delegates] are happy and they feel more supported then logic dictates that might be as far as you can go really."* [Hank, interview 1] He and Harriet had even discussed the possibility of formalising the learning programme with the hope of getting it accredited

via one of their higher education partners. However, the changes in the wider NHS affected the progress of the programme and as a result the project and its evaluation was put on hold.

Reflecting on the ROI approach, Hank believed that success could be defined at different stages. He laughingly declared, *"certainly one level of success would be going to day 1 of the course and going back on day 2"*. [Hank, interview 3] However, on a more serious note he believed that passing the assessment and using the knowledge to bring value to work on the job were also signs of success. He also added, *"...completing one of these reports that we're still working on to the point where we've used the methodology from the start through the evaluation to the end and we've actually done a final report assessing everything ...follow the process from start to finish on something, so that would definitely be good for me."* [Hank, interview 3] This is regardless of the level that a project was being evaluated at. He also shared that employees at some of the organisations they worked with have attended the course, *"...we're all kind of looking at things in the same way now and for the same reason...a lot more focused and effective, hopefully this will be an on-going process."* [Hank, interview 3]

With background qualifications in the arts, he found it particularly challenging, *"It was really hard for me to get my head around and it's still a different way of thinking, almost a statistical way of thinking really, and that's something that doesn't come naturally to me....so working in this almost a scientific manner really, its different to my background so I do find that a challenge but I mean, I got there, I did it, I've done the course, I've got an understanding of the levels. The challenge is to make sure I stick with them and I get them right..."* [Hank, interview 3]

Hank compared his previous experience working on projects to what he was doing since learning the ROI approach. He felt that the most significant impact for him was *"...just focussing on exactly why you are doing something along the way...realising and understanding and working out and trying to achieve the benchmarks along the way, the fact that they are there and they are valuable in their own right, which is not something that was clear to me in some of the other jobs that I have done. It was always about the end product, not that the end products aren't important but there are things along the way that are of value that could be used to evaluate, sort of qualify things."* [Hank, interview 3]

5.1.4 Unit D – Hazel, HN

Background

Hazel worked in one of the Teaching Trusts that was overseen by HN. The Trust employed around 13,000 employees. She collaborated with a number of different stakeholders including key hospital departments as well as university experts. She was one of the managers who lead a team that developed e-learning packages, although she previously held a general management role. The e-learning courses were normally offered indefinitely. Employees could peruse a catalogue and select the course(s) they were interested in completing and, once approved by their manager they could complete it. The courses were not generally assessed on whether they were effective or had any impact.

Perceptions and Interpretations of ROI

Hazel was trained as an occupational psychologist but her role as the e-learning manager was now mainly project management. However, she disclosed that her education and training helped her to appreciate the importance of rigour when measuring the impact of her programmes. When she found out about the 2-day ROI workshop she was keen to attend, *“...we did nothing on the impact on the business and you’re taking valuable nurses away from work, from the wards and it was just, that is the culture at the NHS. I’m sure private businesses wouldn’t do that, just to keep sending people on courses without looking at whether they’ve applied anything.”* [Hazel, interview 1]

After completing the Foundation award Hazel admitted, *“I’m really pleased I’ve done it but it could have been a lot simpler, I think.”* [Hazel, interview 1] She explained that she preferred interactive courses and thought the approach was *“...a very simple idea, which was sort of taught in a complicated way for me and so I got a bit demotivated.”* [Hazel, interview 1] However, she still completed and passed the assessment, and went on to apply the approach on one of her e-learning courses.

Applying the ROI approach

Hazel worked with key stakeholders in her Trust to develop an e-learning course for a targeted group of employees that served outpatients in three departments at the hospital. One of the key stakeholders was the subject expert who had access to the data so that they could track the performance of the targeted employees before, during and after they completed the course. The key stakeholders included the manager and assistant manager of the targeted employees, the subject expert and Hazel. The course was addressing a quality issue that was affecting their income source *"...we don't get paid for the work we've done so we get less money"* [Hazel, interview 1]. This work is in reference to the number and type of patients seen in the outpatient department. Hazel used this course as her project for the assessment, *"...because I did the project, the assessment, then I'm following the project plan, which is very useful."* [Hazel, interview 1] A summary of the project follows:

L1: 100% of Learners confirm the relevance to the organisation and their role; as well as recommend to others, identify 3 learning points and identify how they will implement what has been learnt; 90% of Learners confirm their overall satisfaction with the course; and all managers of the staff to be trained confirm the appropriateness of the programme. *"I was thinking to give it [end of course questionnaire] to them, just to give it to them on the day but we've decided to incorporate it into the e-learning documents and so they have to do the end of course questionnaire before they go for the certificate, so they'll have it electronically."* [Hazel, interview 1]

L2: Learners know the importance of the course content and all learners to pass the end of course test at 100% within two attempts.

L3: individuals who have been through training will reduce their error levels to 2% within 3 months following the training and managers communicate the importance of the course content. The data collection plan included *"'Supervisor: appraisals by analysing [relevant] Reports' and 'Monthly staff team brief'."* [Hazel, abdi assessment]

L4: Improve the quality of the input of the course content, to a minimum of 98% accuracy within 3 months of the training and sustained thereafter; Reduce number of staff by at least one whole time equivalent within 3 months of the end of training; Cut errors to 2% maximum within 3 months of the

end of training; Savings as a result of improved quality (to be determined); and Department moves up the league table by at least 3 places within 3 months of the end of training and this is sustained

L5: the project plan did not include an objective for this level although Hazel believed *"yeah, that's the bottom line, that's what people will listen to."* [Hazel, interview 1]

After the first project meeting, Hazel shared that they made some alterations to the programme to include a pass mark and that the learners would have three attempts to pass. They also planned to carry out a pilot but instead eventually asked all the targeted employees to complete the course at the learning centre over a three-week period. *"...so the people went through and they all printed that out, you know the 1st stage evaluation, 'what you going to do when you get back to work?' And so they all did that and took that back to work with them. And, that's where we are! So that means, they've done their level 1 questionnaires as well as the level 2 tests."* [Hazel, interview 2] She added *"...so, people in our department went through it and it ranged from 25 minutes to 45 minutes, ... a bit of difference. We think on average about 30 minutes. So it's quite a nice little programme. They liked it as well, yeah."* [Hazel, interview 2]

The schedule was kept, for the most part, but was extended when the results did not meet expectations. The project team developed the course because they thought that it would address a quality issue they were having. Initially, when the employees completed the course there was an improvement however, the performance then reverted to what it was before. The project team thought these employees might have needed further training, specifically better training on using the IT system. *"I think it's [the results] interesting. They [project team] were very disappointed, obviously, because you think, get people on a 30 minute training programme problem's fixed and then you're going to save all this money, because you get penalised for errors but it's not like that, you got to do some more work. Luckily it's these people [the project team] who are happy to do that. I think they knew the system training wasn't very good but they weren't actually doing anything about it, now they've really got to do something about it."* [Hazel, interview 3]

The isolation technique selected was trend line analysis because the subject expert had access to this data. *"We're just going to look at the evaluation data from the course, and we'll just be looking at whether, trend lines, whether the stats have improved. We decided, we were going to have a*

control group but not now, we're using 3 separate departments and we're looking at data before and data after." [Hazel, interview 1]

The project team selected the three departments that participated because they were confident of getting the required support. They discussed other departments and whether to involve them in the project. However, they decided against it *"...and we talked about the reasons why, and so they are barriers and so we've gone for those three departments where we know that we can get some support. So we'll know they will be up for it, we know that they will give people an hour's study leave, and then we can put together a report that hopefully shows savings which might persuade these other directorates ...that it's worth doing"* [Hazel, interview 1]

Hazel's assessment for the Foundation award included both direct and indirect cost classifications: Direct (Cost away from work of learners (45 minutes x £ per hour) x number of participants and Analysis costs (managers time to review Reports)); Indirect (Staff salaries calculated for time away from the job; Calculate increase in payments as a result of accurate data; Calculate decrease in any penalties for not achieving targets; and Calculate any costs of fines for breaching Information Governance standards).

However, during the project Hazel shared that they might not go in detail with collecting the costs. *"You know, I don't think we'll be doing that in that much detail, we might, but I don't think we'll be going any further because the course is free. The system that we put it on is free but if that question is asked, we could look at staff's salaries and so on, but it will be the time away from work that's costed and also the time from the four people on the project group that we've put into adapting the programme."* [Hazel, interview 1]

Challenges to applying the ROI approach

The project team decided to carry out further investigations to ascertain the source of the quality issue they were having before developing a new course about using the IT system. A focus group was held with a sample of the targeted employees and the feedback indicated that the issue could not have been addressed solely from an e-learning course. *"But this group of people have said, that*

it's fine, its not the system, they were saying it is human error. ...So they are saying that they feel that they've got sufficient training. ... so they [project team] are going to dig a little deeper. So I think that's the next thing before we go on to the questionnaire." [Hazel, interview 4] The focus group identified some reasons for the quality issue, which indicated that the targeted employees were not solely responsible and that the issue might stem from the Trust's procedural system.

The quality issue the e-learning course was developed to address was not resolved. *"I would have liked to see positive results from this, so we could carry on with some of the other training courses but I can't really show that the e-learning has made a difference because it hasn't... We were thinking we would be able to show a return on investment in terms of fewer errors but we can't do that now so I think rather than wait, I'll just publicise it generally."* [Hazel, interview 3] Hazel added, *"I just don't think the e-learning course helped."* [Hazel, interview 4] However, she conceded that her key stakeholders *"...wouldn't have done any of this so they're really pleased. You know, they've been sort of pushed into it, in a way, if you like. Once you realise that you've done some training, it's not reduced the errors, then you can't really leave it, you've got to carry on really and find out the real cause."* [Hazel, interview 4]

Other persons in HN have completed the Foundation award but have not applied it in their jobs. Hazel recalled one person she was acquainted with, *"...he hasn't done anything with it. It's not an interest really, like it is with me, nobody really was doing anything. They've written the project and they've passed the course but they've not been that interested enough or able to, in terms of time, to carry it out."* [Hazel, interview 3]

However, she believed this might soon change because of a discussion she had with a senior manager, *"...he's really keen on return on investment. And I think people outside of learning and development don't realise that we don't evaluate what we do in terms of achieving business objectives. I think they assume we do, I'm not sure."* [Hazel, interview 3] She added that courses especially with quite senior staff and even mandatory training programmes should be evaluated. *"I just think it should be much more cost effective it should be looked at, shouldn't it? Yeah, I think if it is law then, it's a little bit different, maybe you can get away with a tick box by law and not changing behaviour because you've got to do it so what's the point in doing a ROI because you can't not do it unless you wanted to do it in a different way."* [Hazel, interview 3]

Hazel reflected on her experience with the ROI approach. *"I like the results and I like having a formula to follow. Although, I thought it could be simpler, perhaps it could be simpler in some way but having to do this report I can refer back to it and it changes from experience. And I really got excited, could be because these people [project team] got excited that we're going to go to the board and they were going to see look how many thousands and thousands of pounds this 30 minute training has saved the Trust but they can't, which is a shame."* [Hazel, interview 3] She took voluntary redundancy and was scheduled to leave HN during the first quarter of 2013. She reflected on her experience evaluating her final e-learning course. *"It takes sort of education to a different level, really. You're not doing a course and that's going to improve your work, it's not linear like that, is it, there are other things, other variables. And it's being bothered, because Learning and Development staff have got so much to do, really, you know when they say it's like ticking boxes, it is, sometimes, because that's all they've got time to do."* [Hazel, interview 3]

5.2 Findings from the Health Service Units

The units in the health service context were prepared from different organisations overseen by one of the former SHAs in the UK's NHS, HN. Hannah and Harriet could be considered *proficient or experts* (Kaplan and Anderson, 2004) with about three years' experience applying the approach, although both shared that they are still learning the approach. Hank and Hazel were *advanced beginners* (Dreyfus, 2004), both participating in Foundation workshops (separate events) that were observed in 2012 and then applying the approach to an existing project.

It is no secret that the NHS is under ever more increasing pressures to demonstrate value for money. *"You have got to show that every penny we spend in public money demonstrates a difference. In these current financial and economic climates the better we are at this the better we can justify what we spend."* [Hannah, interview 2] As such, HN was quite proactive in identifying the need to begin evaluating their L&D initiatives and then funding organisations in their region to undertake ROI courses. Theoretically, they should be well placed to deal with challenges being faced to prove the value of their initiatives.

Hannah and Harriet were among the first persons to attend Foundation workshops when HN began offering these courses as a solution to their training evaluation need. At the time, abdi was affiliated with the ROI Institute and were using the Phillips' ROI Methodology™. As such, the content of the workshop material was still more geared towards the corporate context, but they effectively amended the terms to reflect their context and also began applying it to other human capital initiatives, specifically improvement projects. Since then, abdi has gone on to make a number of other changes, culminating in their own abdi ROI recommended approach (discussed in chapter 1).

5.2.1 Perceptions and Interpretations of ROI

In this sector/context there was a nod to the financial metric interpretation, *"there is a financial value that can possibly [be] ascertained but it's not the be all and end all."* [Hank, interview 3] However, ROI was mainly used to refer to the approach but *"...it isn't just a financial technique, which I think sometimes people see. It's not just Kirkpatrick's level and just paying lip service to that, it's a very, very much more detailed process."* [Harriet, Hannah and Harriet interview] Although it was sometimes unclear whether they were referring to the metric or approach, *"but what the ROI information did was inform them of the why, so this is the how you have to do it."* [Hannah, Hannah and Harriet interview] In this last quote, it could be argued that the reference is to the approach since the speaker had not yet evaluated an initiative to L5 (ROI).

This reference to ROI as an approach could be seen in the language the participants used (underlined), e.g. *"...there is a risk that if you don't tell them about how they should have done it, then the outcomes will never be full ROI outcomes. So, it makes it looks a weaker tool."* [Hannah, Hannah and Harriet interview]; *"... so we were able to stick to the ROI rules, i.e. only collect data that's already available and easy to collect..."* [Harriet, interview 2]; and *"...maybe you can get away with a tick box by law and not changing behaviour because you've got to do it so what's the point in doing a ROI because you can't not do it unless you wanted to do it in a different way."* [Hazel, interview 3] These demonstrate that the participants were referring to the process/framework for applying the metric and not the metric alone.

As an approach, it was described as a change tool (more on this later). *"That's why I would say this is a change tool and it changes culture and it changes your involvement."* [Hannah, interview 2] and *"Are we ticking bums on seats, [or] are we ticking changed behaviour, and that's what ROI does very well is change behaviour."* [Hannah, Hannah and Harriet interview]

The core of the Foundation award is about planning, i.e. planning both the initiative and the evaluation of the initiative. *"I would say the most successful element of ROI is probably better project management across projects."* [Hannah, Hannah and Harriet interview] This includes a very detailed process and specific procedures to follow. *"I like the results and I like having a formula to follow. Although, I thought it could be simpler, perhaps it could be simpler in some way but having to do this report I can refer back to it and it changes from experience."* [Hazel, interview 3] It captures the journey along the way, which is important for identifying and understanding areas for improvement as well as reasons for a project being successful or unsuccessful, what works and does not work. *"...just focussing on exactly why you are doing something along the way...realising and understanding and working out and trying to achieve the benchmarks along the way, the fact that they are there and they are valuable in their own right, ...not that the end products aren't important but there are things along the way that are of value that could be used to evaluate, sort of qualify things."* [Hank, interview 3]

However, both Harriet and Hank shared that they found the approach complex and difficult. *"I mean the methodology's quite complex and takes a bit of getting your head round, but once you actually get your head round it and you've got your standard tools that you use, you can actually cost something out in very rough terms within five or ten minutes..."* [Harriet, interview 2] Hank shared, *"Depending on your background, it's hard work, it's hard to get your head around. I found it really hard. ...but when you get into it it's quite logical and it makes a lot of sense"* [Hank, interview 3]

Nonetheless, after learning the approach *"...in a nutshell it's really sharpened our businesses acumen, ...in a, you know, a massive way."* [Harriet, Hannah and Harriet interview]

5.2.2 Applying the ROI approach

Argyris and Kaplan's (1994) processes for introducing a new technical approach were not fully present in this context, although this may be changing. HN funded ROI courses for relevant staff in their region (Argyris and Kaplan's Process I step 1: Education). This helped the implementation of the approach across the region. However, although they were supporting the implementation of this evaluation approach (Argyris and Kaplan's Process I step 2: Sponsorship) it was not enough, support/sponsorship for this kind of organisational culture change required strong support from higher up the chain of command within the NHS, especially during the Action phase (Argyris and Kaplan, 1994). Hannah and Harriet could be considered Change Agents in both phases, while Hazel and Hank were Targets in the Action phase and not part of the Analysis phase. There also needed to be alignment of incentives to actual applications of the approach (Argyris and Kaplan's Process I step 3: Aligned Incentives) once the ROI qualification had been earned, since there appeared to be persons who have gained it but do not apply it to evaluating their L&D initiatives.

For Argyris and Kaplan's Process II: all the participants are externally committed to applying the approach since HN has committed to this being the L&D evaluation approach used in their region. Before taking redundancy, Hazel appeared to be internally committed to applying the approach; she persisted with it even though she found the course boring. Having invested considerable time, effort and resources to learn and apply the approach, it could be said that Hannah and Harriet are deeply internally committed to seeing it embedded in HN.

Table 11 summarises the key findings in relation to Argyris and Kaplan's processes.

Table 11: Argyris and Kaplan's Processes (Health Service)

Steps	Hannah	Harriet	Hank	Hazel
Process I: Education				
ID needs gap	Part of first cohort to participate in ROI course following HN's initiative to identify L&D training needs gap.	Part of first cohort to participate in ROI course following HN's initiative to identify L&D training needs gap.	ROI approach being used in his department; works with Harriet.	Interested in evaluating L&D courses to determine ROI.
Articulate new approach	The abdi ROI recommended approach was selected (initially it was Phillips' ROI Methodology) and funded by HN.	The abdi ROI recommended approach was selected (initially it was Phillips' ROI Methodology) and funded by HN.	Signed up and attended Foundation course.	Signed up and attended Foundation course.
Provide examples	Initially, brochures, leaflets and websites, later via workshops, workbook and book.	Initially, brochures, leaflets and websites, later via workshops, workbook and book.	Colleagues, workshops, workbook and book.	Colleagues, workshops, workbook and book.
Process I: Sponsorship				
Phase 1 – Analysis	Change Agent	Change Agent	N/A	N/A
Phase 2 – Action	Change Agent	Change Agent	Target	Target
Process I: Aligned Incentives				
Organisational Enablers	Provision of information: the ROI course.	Provision of information: the ROI course.	Provision of information: the ROI course.	Provision of information: the ROI course.
Process II: Internal Commitment				
External	Yes	Yes	Yes	Yes
Internal	Yes, deeply	Yes, deeply	No	Yes

By applying the approach the L&D practitioner learnt how to look under the bonnet of the impact of their initiative, so to speak. It pushed these practitioners to reject the assumption that doing the course meant the learner automatically improved their work. They were also now approaching L&D in a different way by bringing the business of health to their roles, i.e. looking at the whole picture and how L&D fitted in that picture, which was not something they had come across in their own preparations for their roles. Learning the approach instilled the importance of evaluating what they did in terms of the strategic objectives of the organisation. This was not only among L&D practitioners but also other stakeholders, e.g. clinicians, who encountered the approach through these ROI-qualified practitioners. They too were beginning to understand the business of health (Hannah, HN).

The units highlighted a number of similarities, shared learning and issues, when trying to actually apply the approach to an initiative. These included improved project management skills, fostering appropriate stakeholder engagement, and identifying behaviour that needed to be changed. Hannah and Harriet agreed that learning the ROI approach had helped to build their confidence to not only defend the approach but also to make changes in their own practice, challenging where necessary.

A key message throughout these units was whether L&D initiatives were able to demonstrate that they were making a difference. *"And he said to me, 'my training has been evaluated as great' and I said, 'how do you know it's great?' And it's quite challenging to say that because he said, 'what do you mean, how do I know? Are you saying that my training is not very good?' 'No, I'm not say that. What I'm saying is; how do you know it's great? Other than them telling you, how do you know it's made a difference?' 'Well, I'm not sure I can say that?' 'So how do you know it's great?' you know, so I said, 'I'm not saying what you do isn't in form and it isn't doing the right thing but how do we know we've got the right people on the programmes to take back what you want them to do?'"* [Hannah, interview 2] In this quote from Hannah, it can be seen that a training event that is considered to be great needed to demonstrate that it made a difference, i.e. the right people attended and had taken back new knowledge to their respective areas. This is one of the main messages from the ROI approach, which had obviously been internalized by Hannah and become part of her practice.

The difference being made should be demonstrated at the individual level, i.e. what learners were actually doing differently that was better. In this sense, there appears to be more focus on evaluating

to L3. This could be because these participants have L&D roles, where they were responsible for changing the behaviour of learners that attended their events. However, starting at L4, the organisational need or opportunity, is advocated in the approach.

Sometimes the evaluation of the L&D event cannot demonstrate that a difference had been made but instead it highlighted that there was another issue that was the source of the problem. Hannah and Hazel found this out in their projects when initial improvements in organisational performance that followed their initiatives were reversed shortly after but both went on to ascertain the real source of the problem. In both units, early feedback suggested that the real source of the problem was their IT system. For Hannah, the IT system was deemed non-user/practitioner friendly. At first, Harriet's project team thought that the training for their IT system was inadequate. However, following a focus group it was revealed that the issue was more systemic to the way data was manually collected and stored in patient files. Incorrect and incomplete data was being recorded because the patients' manual files were haphazardly organized. (For more on human/operator errors see JM Juran's (1968) paper, *Operator Errors – Time for a New Look*.) Nevertheless, this is one of the benefits of evaluating initiatives promoted by evaluators, i.e. the evaluation not only shows the positive results but also identifies where negatives occur that need further investigation (Massy and Harrison, 2014; Patton, 2002).

Nevertheless, for both projects the question still remained, would the training programme have been required if a proper training needs analysis had been carried out? Training needs analysis is recommended in the ROI approach but there may need to be more information provided on the how this is done as part of the Foundation workshop.

Getting stakeholders to understand the approach was a successful endeavour for Harriet. Since they had already agreed to and completed the Foundation workshop, they were cognisant of the kinds of data required and why it was required. She worked with them to gain access to their electronic portfolio for the required data. Using electronic, specifically online tools, helped to improve data collection. Both Harriet and Hazel adopted similar strategies to improve data collection, i.e. their learners could not receive their certificates until they had completed their L1 evaluation.

Hannah, Harriett and Hazel's project teams included key stakeholders who had access to the required data; in Harriett and Hazel's case all the required data. This was instrumental in them completing their evaluations, even though the results were disappointing for Hazel.

5.2.3 Challenges to applying the ROI approach

The approach was difficult to apply in the health service context for many reasons. First the background of the learner may have affected how early they could grasp the content of the Foundation workshop. Coming from an arts and humanities background, Hank found the workshops particularly difficult. On the other hand, Hazel, who was an occupational psychologist, thought it was simple but taught in a complicated way. Nevertheless, they both received their qualifications and were able to use their assessments in their actual projects as their project plans. Both Hannah and Harriet agreed that they had initially found it challenging to learn the language of the ROI training, although they both had prior management training. To engage stakeholders, they have had to adapt their communication style. It was particularly challenging communicating with stakeholders who have had previous ROI training, especially those in Finance.

Hannah and Harriet identified two of the biggest challenges as data collection, including quality, type, timeliness and access, as well as stakeholder engagement. The data that is particularly challenging to collect are from L3 to L5 because this is outside of the remit of these L&D practitioners. Hank was in the process of changing his project plan because of wider government stipulations that affected his project at L4. He had not experienced collecting L3 data as yet. Hazel did not face these issues as much with her project because her project group had all the required stakeholders, including the managers of the trainees and the course content manager who provided data for L4.

Cost data is difficult to capture but HN had implemented the cost template from the ROI framework, which is based on Time-Driven Activity Based Costing, to facilitate standardisation across the region. Costs had been categorised as fixed, semi-variable and variable costs covering all phases of the project, i.e. analysis and planning, design and development, pilot group delivery, on-going delivery and evaluation. Staff time was calculated for how long they spent on the initiative. Harriet was

monetising productivity outputs in her project, in line with the policy of the national organisation for that project.

The attribution techniques stipulated in the approach were not robustly applied during actual application, even though it is a key component for evaluating to L4 and L5. Where they were applied, it appeared that the preferred choices were control groups, trend line analysis and estimation.

Getting stakeholders engaged in the evaluation of the initiative was difficult in the NHS. Notwithstanding the various agencies that the L&D practitioner had to work with, getting them bought in to the idea of evaluating to determine value for money of L&D initiatives had been challenging. Hannah found that when she shared relevant data with them it engaged them more quickly. Another option being utilised by Hank was networking with existing stakeholders who may be able to influence engagement on the L&D initiative. What added to the stakeholder engagement challenge were the frequent changes in project personnel because new stakeholders have to be engaged, regardless of where the project had gone on its cycle.

At the time of the first interviews, some of the organisations overseen by HN had been applying the approach for around three years. Yet, both Hannah and Harriet agreed that there was a long journey ahead. Making cultural changes in an organisation like the NHS is a massive undertaking. HN was only one SHA within that organisation that had attempted to change their region's culture by getting the ROI approach embedded as an L&D evaluation tool. HN began by offering ROI courses and qualifications to their whole region for mainly L&D practitioners but it soon became apparent that other functions needed to be engaged. Although persons with other functional roles have started to complete the course, this was not yet widespread and so within HN, a complete organisational culture change had not yet occurred.

The framework and principles of the ROI approach form a very detailed process that takes time to embed. The process incorporates a number of other methodologies and management tools, which can also take time to embed. Tools, such as the V Diagram and the Needs and Objectives templates were useful during the knowledge conversion process.

In addition, in the ROI approach initiatives are evaluated only up to 12 months, i.e. even if the initiative carries on for longer the evaluation should be for a 12-month period. For example, Hannah's project ran for two years even though she evaluated it over a 12-month period. Since these practitioners were applying their knowledge in practice over this time, it would inevitably take time for the approach to be embedded in the organisation. Harriett highlighted this issue as one of the reasons the approach was taking long to embed within the organisation.

There were early indications that other areas of the NHS, in particular the new CCGs, were cognisant of some of the language of ROI. *"But the one thing the CCGs I've spoken to, they're very clear now that they have to look at outcomes and if they are thinking down that road we are halfway there to using an ROI methodology in some areas. I think it'll be difficult to use in all areas just because of the resource implications but where it matters I think we should do it."* [Hannah, interview 2] This was also seen by the creation of a new senior post, Business Case and ROI Lead, which was posted in early 2013.

Even so, there appeared to be some parts of the approach that had not yet been fully internalised. These relate particularly to applying specific areas. For example, when undertaking evaluations of human capital initiatives, setting SMART objectives is important. *"If I went into another project like this now I would ask different questions. I would ask, 'what is it that you want to achieve, and what is it that you can realistically change?'"* [Hannah, interview 2] These questions should have already been asked at the point of the training needs analysis.

For Harriett, L0 was an assessment of the learners' academic qualifications and a screening of their literacy and numeracy levels to determine their level of understanding as they entered the programme. *"So you might get a student who's got a GCSE grade C in English or Maths, but they might come out at entry level three, ... GCSE grade C is level two. So they might come out as much as two scores below their certificated achievement..."* [Harriet, interview 2] She interpreted L0 as her baseline, *"...so we started the data collection at level zero, if you like, in April. So we got our baselines in April..."* [Harriet, interview 2] This can be confusing since baseline data should be collected for L4 objectives, and in some cases L3 objectives (Massy and Harrison, 2014). In this quote, Harriet is actually referring to baseline data that was collected for L4 objectives. Instead, L0

could be considered to be the point where the selection of the right people to participate in the initiative is carried out. The facilitator made this point on day 2 of workshop 1.

The approach was not being followed in a structured way. *"...we've become more experienced in using it. I think in the early days what I would say, ...we tended to look at levels 1 to 5, and we almost tried to work through it at a linear process, but now we're getting smarter at going in and sort of looking at level 3 first, and saying to people, well, 'what's good about what you do?' 'Tell us about what you see the practice as being?' And you can almost sort of work in there and then go back to, 'well, okay, if that's what we think good practice is, how do we know that?' And, 'how many people do we see who are the role models?' Or, 'have you got any baseline data to say where these people came in at?' ...So, we have to sort of use different ways, to go in at different levels. So, you might not come in and see something in a very sort of structured manner, ... but, you know, you've got to actually just use it quite, sometimes quite in an abstract way."* [Harriet, interview 1]

In this quote from Harriet, it can be seen that she looked at the approach in a linear, chronological way, L1 to L5, whereas the approach is taught (V diagram) from L4 to L1 then L1 to L5. She also interpreted starting at L3 as using it "*smarter*". Her focus on L3 is understandable since her commissioners were interested in the change in behaviour her project/programme had created. However, there was still that link to the organisation's performance that needed to be made. Before a behavioural change need is confirmed there has to be some evidence that it links to the organisation's performance result being targeted. This was still missing in this context, largely because of their functional L&D roles, i.e. there was usually a mandate set from higher up the chain of command (outside of their remit) for the particular programme and these practitioners were expected to just deliver the programme.

When these practitioners were asked to evaluate initiatives, sometimes it may not be feasible to conduct one. Identifying these circumstances and having the confidence to decline the invitation to apply this ROI approach is an area that could benefit by more guidelines in this sector/context.

5.3 Chapter Summary

This chapter presented the four units in the health service context (Hannah, Harriet, Hank and Hazel). The practitioners in this context interpreted the ROI approach as a change tool, where planning was key. The approach provided a detailed process they could use to determine what difference their L&D initiative made, i.e. what worked or did not work and why, as well as helped them to identify behaviour that required changing and to track the journey along the way of implementing changed behaviour. These practitioners believed they had achieved some success in applying the approach; they were more business savvy, i.e. more cognisant of the business of health. Although they did not have sponsorship from the highest levels in the NHS, the approach was being championed by the SHA of their region and therefore, relevant stakeholders could be educated in the approach. However, incentives for applying the approach (particularly organisation enablers) to all L&D initiatives were not implemented. This impeded the embedding of the approach. Stakeholder engagement from all or most of the relevant project stakeholders, e.g. in Hannah, Harriett and Hazel's units, were important to achieve success.

These units revealed that the ROI approach was difficult to apply possibly because of the practitioner's educational background (as in Hank's unit). In addition, they faced challenges in accessing the required data because of the quality, type of data available and the time it would take to collect it. Although they acknowledged the importance of isolating other influencing factors, they did not undertake robust attribution analysis. This was an area that needed improvement. In addition, they needed to improve how they conducted their training needs analysis. The practitioners also highlighted that the frequent changes of project personnel made it difficult to apply the approach since each new person had to be engaged in the process.

The approach took long to embed because the NHS is a very large organisation and to change the culture of an organisation of that size is a massive undertaking. In addition, practitioners were learning the ROI processes (which took time) as the implementation was taking place. Each project evaluation undertaken was part of the implementation and embedding process and many of these projects were large and complex, requiring a number of years for planning and implementation.

Key issues were identified in this sector/context. First, there was a lack of sponsorship from the highest level of management in the NHS. Secondly, clarity on some elements of the approach was required particularly regarding training needs analysis, L0 definition, and an emphasis on applying the approach in a structured way (from L4). Finally, practitioners could benefit from guidelines on how and when to reject a request for a project evaluation.

6 International Development Context – Units and Findings

This chapter presents the units and findings for the international development context.

6.1 The International Development Units

6.1.1 Unit A – IB, Isaiah

Background

IB is a UK charity that works with a variety of partners and has offices across the globe. They deliver a diverse range of projects in the international development sector. Isaiah is the key person behind the implementation of the ROI approach and one of the senior managers at IB. He recalled being introduced to the ROI approach at a Human Resource (HR) conference. This was when abdi Ltd was an affiliate of the ROI Institute and applied the Phillips' ROI Methodology™. At the time he was working in a HR role and IB was in the process of reorganising its structure, moving from a centralised way of managing HR to a more decentralised management structure worldwide. Isaiah explained, *“...we were looking at what do we invest in staff development..., how much do we spend what do we get, this [the ROI approach] looked like a good way of understanding that better and we were asked also to come up with a policy and a framework for how the organisation will do its learning and development...”* [Isaiah, interview 2]

Perceptions and Interpretations of ROI

As the reorganisation continued, IB adopted some of the techniques from the ROI approach and embedded it into their policy. They also conducted pilot tests on some of their training and HR interventions to determine whether they were successful or not. The HR team was focused on creating an L&D framework to support the decentralised staff in *“how to plan for, design, implement and evaluate learning and development interventions”* [Isaiah, interview 2].

Even then Isaiah saw the potential of applying the approach in a wider context throughout IB. He *“always saw a future in it, I saw it and understood it, the whole.”* [Isaiah, interview 2] He explained

that he not only saw how it could be used to evaluate their L&D initiatives but also that it could be used as a standardized way of evaluating all of IB's work, *"...not just this investment in staff... it [the ROI approach] borrows from many other techniques as well but essentially an educational model that could easily be applied in our work."* [Isaiah, interview 2] He admitted that there were some areas in IB where it would be difficult to measure impact but they were making inroads.

During the first interview, Isaiah shared that he did not think HR used the approach any more. He explained further in the second interview that although the policy may still exist, after the decentralisation *"...there is no demand, no one is asking, no one is saying or no one is withholding learning and development investment for people who aren't delivering business impact."* [Isaiah, interview 2]

Isaiah candidly shared the initial reactions of his colleagues when he started implementing the approach, *"...actually I think I was talking another language, people didn't get it at all. So I think I saw the potential and when I was applying from my job from HR into the corporate evaluation team at the interview I was talking about, 'look here it is and this would work on every [IB] project you know'. And I could see how it would work. It was lost. It was completely lost on them. I don't think they got it at all and I could have even scared them off..."* [Isaiah, interview 2]

Frustrated with IB's struggle to get information on the performance of their projects and seeing the potential of the approach, Isaiah realized that he had to change his approach to get his message across. He had to introduce the approach incrementally. He started off by working with abdi Ltd to create a customized IB logic model that incorporated key elements of the approach. *"I couldn't bring in the whole process and everything at the beginning so I just brought in something that said this is the kind of data, as an organization, that we need to start managing and collecting and this is how, this is a interrelationship between the different types... but I knew very well what I was doing – in that I was aligning it to the training offer that were available including through the ROI Institute."* [Isaiah, interview 2] He further explained that once he could get the foundation aligned, they would be able to draw from practice outside the organisation rather than creating a measurement system from scratch. In addition, IB already had a measurement system with similar foundations that the ROI approach could be laid on.

Isaiah's team immediately understood the IB logic model, however, he still faced strong opposition from other colleagues. He shared the reactions of the members of the first project he introduced it to, *"...it freaked everybody out, absolutely freaked everybody out! It really did, 'too complex', 'impossible to collect that kind of information', 'it's going to mean a whole new evaluation system', 'no one is trained for it', 'no one has the skills for it'. But even just conceptually the idea that you'll be tracking a chain of impact and what level 4 is, tying that down."* [Isaiah, interview 2] He admitted that within IB and the international development sector, a lot was said about what was being contributed to but there was very little expertise in *"... actually being tied down to measuring whether you actually are contributing or not."* [Isaiah, interview 2]

In essence, IB was undergoing a clash of cultures where on the one hand they were *"very heavily focused on driving activity, 'so we want more people in our programmes', doing what? achieving what? nobody knows but just more of them. It drove heavy investment into activity planning and, you know, activity product development."* [Isaiah, interview 2] On the other hand Isaiah was trying to implement *"...an approach that asked people to plan for, collect and report outcome data".* [Isaiah, interview 2] Needless to say, he received a lot of objections especially from in-country project managers, *"... 'well, no one is asking me for this, I'm not being managed on this, I'm not being asked to invest in it or pay money or spend time on it, my country director is not interested, my project/programme manager is not interested, why would I do it? You're telling me to do it and you're the only one telling me to do it and what are you going to do with this anyway?'"* [Isaiah, interview 2]

Applying the ROI approach

Nevertheless, Isaiah pressed on with his conviction that this approach was the solution to measuring the performance of projects at IB. He sought like-minded individuals and friends who were ambitious *"...and people who are looking to try out something new, make a mark, make a name, an early adopter type of people out in the field."* [Isaiah, interview 2] A key part of his implementation plan was to get more professionalization via the accredited ROI awards and certificates. Professional UK qualifications were of value to IB staff and the ROI awards were unique in that respect. *"So you can get a UK qualification if you do this course and the course has a worked based application to it."* [Isaiah, interview 2] Over the years the number of persons completing the accreditations has fallen

although the number of persons completing the training workshops has increased. Isaiah is examining this result further.

Regardless of their educational backgrounds, Isaiah received feedback from workshop attendees about how hard it was to understand. However, he believed that the ROI approach was *"... simple, its a simple concept, people get it academically, applying it consistently is hard work, it takes a lot of motivation because it is new, you have to invest more time in it and then you, it gets faster and you get better and its easier but you have to invest at the beginning."* [Isaiah, interview 2]

Isaiah admitted that his current position in IB allowed him and his team to control some of the organisation's reporting. Initially, the reports included activities, however, the executive board wanted to know the stories behind the featured projects. Isaiah and his team progressively changed this over a 3-year period, raising the bar each year. *"So in year one we reported a mixture of activity stories and impact stories. ...So in year two we refused to report any activity stories we got and only report outcome stories. Which meant we started getting limited number of stories that we could report. And in year three I decided that I was not going to chase around and find your stories for you, if your teams aren't doing it then I'll send a report to executive board empty. And that just started to get some things driving as well."* [Isaiah, interview 2]

There were other drivers that were pushing the implementation of the approach in IB. For example, they needed to get more partners interested in working with them. Funders in the international development sector were increasingly asking their partnership organisations to provide evidence of the impact of their initiatives. Isaiah reminded his project managers that, *"...you've got this target about partnership income, you're not going to get partners interested if you don't do this [impact evaluation].... You've got to have your data sorted."* [Isaiah, interview 2]

Unlike organisations in the corporate sector, IB cannot tell their project managers that their funding would be reduced if they were not performing. Projects were developed based on other priorities, such as the UK's political agenda and the needs of the country where the projects were carried out. However, some of IB's projects included providing professional services to organisations and people in these countries. These projects could allow for some elements of performance-based reward, where project managers were required to demonstrate impact to continue receiving support.

Nonetheless, Isaiah had to appeal to other motivators in project managers, *"I think the thing that sells the impact work beyond the benefit to the individual's career or the individual's learning is that measuring the outcomes of the work we do strikes right at the heart of why people join the organization... making that visible in a very measurable and robust sort of way, an evidence-based way."* [Isaiah, interview 2] He believed IB employees had a strong emotional connection to the work they did in the countries they were based in and that they wanted to demonstrate the effects of their efforts.

Over the years IB had garnered some success in applying the ROI approach. Isaiah conceded that while *"we're good at getting up to level 3, we're not so good at really managing for and collecting baseline and collecting level 4 data"*. [Isaiah, interview 2] They had significant challenges in trying to evaluate their projects to L5, mainly because it was difficult to convert benefits to monetary values. He added, *"And we found it difficult, actually to really tie down the benefits in the year that the evaluation and implementation was being done because some of the effects happened further down the line."* [Isaiah, interview 2]

IB had standardized some tools, such as a customer satisfaction questionnaire and annual survey with standard impact measures. The survey looked at personal and institutional benefits in areas such as knowledge and skills for persons who had been active in one of IB's projects globally. They also used research tools such as, interviews, focus groups, questionnaires and action planning (to some degree). Isaiah believed that they needed to improve in this area by embedding tools within their projects where data could be collected without having to ask for it. E.g. a tool that when used correctly provides evidence of it being used automatically/electronically.

Isaiah felt that applying the attribution techniques was an advanced part of the approach that had not been applied much in IB. This was because many of their projects were evaluated to L2 and L3 and attribution was not yet relevant. Where it had been done, it had been mainly experts' and participants' estimation of the project's impact on themselves.

IB used their existing global financial system to track costs, which included programme and running costs, staff costs, overhead and design costs (from the UK), travel and subsistence, accommodation, content design and marketing, etc. However, only the UK-based staff logged their time to projects,

which meant, *"we don't have a good handle of costs for that reason and until that comes up we won't."* [Isaiah, interview 3]

Isaiah explained that they were looking at different techniques to identify and monetize benefits in some projects but there were other concerns, such as converting to one currency for cross-country comparisons. He shared an internal experiment that used the concept of ROI to evaluate volunteering across countries. He believed that they would be able to monetize some benefits by converting people's time, e.g. volunteer hours, *"...sustained increases in the amount of time put towards something ..."*. [Isaiah, interview 3] However, he cautioned, *"it was sort of an internal experiment because that program is perceived as being expensive. High cost per head as you might imagine 3 months, 6 months effectively living in each other's country and the training involved in that and things but it brought the, considering the values, it brought the cost per head down by half, so it's still a negative return on investment but it makes it a more attractive program than originally but not compared to other programs."* [Isaiah, interview 1] He also added that projects that were aimed at creating wealth would also be an opportunity for converting benefits to monetary values. It was really difficult for IB to isolate and monetize benefits in projects that aimed to improve quality. Although IB had a good track record for achieving non-monetized benefits (L6) for projects, Isaiah conceded that they were not great at measuring them.

Enablers to applying the approach included being able to appeal to IB's staff professional interest, ambition, as well as the motivation of individuals. He recognized that *"... why they stay and why they're here is about the purpose and about the feeling and about the motivation people get through doing good things that work well and having a wider benefit and a non-commercial benefit. So we have to appeal to that part of people's attachment to the work."* [Isaiah, interview 3] Reporting on good work and even submitting reports with empty sections have helped enable implementing the approach in IB. However, Isaiah disclosed that, *"We thought that the assessments and having the qualification would be one of those enablers, I'm not so convinced of that now considering the amount of people we have who don't complete the assessment.... Getting a certificate doesn't seem to help to motivate people to finish it."* [Isaiah, interview 3]

Challenges to applying the ROI approach

Some barriers to applying the approach in IB included leadership, i.e. they did not have a top-down demand for evaluating impact. There was also the wide variety and complexities of projects that required different models for delivery and evaluation. Additionally, there was a lack of standardized values within the organisation and industry that would help especially in the planning phase of applying the approach.

Isaiah also explained that when evaluating long-term projects, they have had to extend the timelines the approach advocates. *“So when you're setting our level 4 indicator and we think that change won't actually happen perhaps until three years it's a matter of understanding when you're setting your level 4 just how long it might take to get to your level 4 rather than within one year and then having the costing rules that help you make sure you are tracking over years.”* [Isaiah, interview 2] The project managers worked through the different levels and assessed their outcomes incrementally. *“So the levels are really helpful for that and having defined categories of intermediate outcome before you get to the last outcome really helps with our kind of work. But I don't know if we're necessarily using it to its best advantage yet but there are examples of a couple of programmes that are doing it and making it work.”* [Isaiah, interview 3]

Another complex issue they faced was going back to projects to evaluate their impact after funding for that project had ceased. This was further exacerbated by a change in IB leadership for that country, *“...the leadership is not there, the money is not there, we don't fund, we don't keep a little bit of money aside with an annual planning process to, you know, for longitudinal research that we might need in two or three years' time we just don't plan in that way currently.”* [Isaiah, interview 3] In spite of this, some of the impact information may come up when IB commissioned country or programme reports to take stock of what they were doing in certain regions or countries for specific areas/projects.

A further challenge was whether his executive board and other colleagues were speaking the same language. Although recently there had been increased demand from the executive board for evidence of impact, Isaiah was not sure they were asking for the same thing, *“I'm not always sure when they ask for it whether they're asking for the same thing. ... I don't think we always understand,*

even though we are asking for it, the complexity behind that needs to make it work..." [Isaiah, interview 3]

Isaiah shared that IB had a culture *"...where instruction, if you're telling someone 'do it this way' is an invitation for challenge and discussion. It's not received as an instruction..."* [Isaiah, interview 3] IB people were being encouraged to meet to discuss their results, *"...where they're bringing data and people are talking about what does this mean, what is it telling us, how can we get better..."* [Isaiah, interview 2] Nevertheless Isaiah conceded that IB does not necessarily have a learning or good analytical culture, *"...we have a culture that is perhaps much happier and more comfortable working in the intuitive field..."* [Isaiah, interview 2] He ascribed this to their particular sector but he believed *"...there are things coming I know that are going to make it very demanding and so we're going to manage this hard, you know, we're going to be looking for efficiency measures, we're going to be looking for effectiveness measures, we're going to manage ourselves on those. So it's coming. And we have a lot of the pieces in place, which is good."* [Isaiah, interview 2]

In his current role, Isaiah had to review his own portfolio of projects to determine those bringing in the best returns on investment. *"But a really interesting thing for me to unpack more as a portfolio manager is how do you compare things in your portfolio and what's delivering value for money and what's not."* [Isaiah, interview 2] Just going for the cheapest project to deliver would change the type of organisation that IB was and *"[w]e will be achieving a different kind of impact"* [Isaiah, interview 2], which was not something IB could do.

Isaiah also saw a business opportunity for IB, where they could teach others in their field about how to evaluate impact. This would require that IB could demonstrate a track record through their reports and case studies. As such, he was working with his colleagues and abdi to enhance this initiative further. He would also like to see IB *"... develop a digital tool that would enable cascading of targets and outcomes to project managers and reporting against that."* [Isaiah, interview 3] This would require major investments even though there were tools already in place that could be adapted.

Isaiah strongly believed that it was important for IB to measure the performance of its projects, regardless of the difficulties. *"It's harder to measure but if we say that it's important and if we say that's what we're supposed to be achieving then we have a duty to provide the evidence that it's*

happening and we have a duty to measure it. And the more we can measure it in quantified ways, even if it is a very qualitative thing that makes it quantifiable, the better we'll be. ... There's a great belief it works and people know it works but they don't have the evidence, they don't have it in any quantifiable way. We must, we have a duty to do that, it is our job. If we say we can spend money on it to achieve it there must be a way of proving it has happened." [Isaiah, interview 3] He added that the best way of reporting was quantitatively and that even a qualitative improvement could be reported in a quantitative way.

Eight years after first being introduced to the approach, Isaiah summed up IB's current status in this way: *"I think we are still at the very beginning of having, we have pockets of really good work going on but by no means enough of a groundswell yet. So very few things I think would go to level 4 across the whole organizational portfolio..."* [Isaiah, interview 2] He explained that, *"we are flexing the model into a sector where it may not have been used before... and we're also trying to use it in sectors where outside the organization it's very new and in fact lot's of people saying 'you cannot'..."* [Isaiah, interview 2] Within IB, Isaiah still faced resistance to quantifying the impact of some of their projects in financial terms but there were those who got it, *"They are also not necessarily convinced by the financial arguments but they are very happy to report isolated impact, you know, at level 6 about the changes they've observed and the data they have, 'we're just not going to put a financial value on that'."* [Isaiah, interview 2] Isaiah agreed that some of their projects should not have a financial value because it would undermine the good work of those projects and the true qualitative value rather than a reductive one.

On reflecting on his journey, Isaiah shared *"... it goes through phases as well, where you feel you are building, you're getting a sense of momentum and then it sort of just drops off a bit more. ... I think what we have to always remember is there is a really long tail behind us so as I'm building my expertise and knowledge and new ideas, ...behind me there is sometimes people who are where I was 2, 3, 4 years ago who are just starting to realize 'oh there is a potential here'. ... It's hard to remember that sometimes that for some people they're all that way back and that's frustrating. So it is a very long broad tail of people. You know, if you imagine it like geese flying, sort of like that, that pyramid shape, it is a really long tail, really long. And if there's a few of us at the front that just change direction slightly they're all catching up they're all still flying the way they used to."* [Isaiah, interview 3]

6.1.2 Unit B – Ingrid, IB

Background

Ingrid was an IB global manager, who had worked with IB for over a decade. She was leading the delivery of one of its programmes across 28 countries. A pilot test of the application of the ROI approach to evaluate this programme was approved for 5 of these countries.

Perceptions and Interpretations of ROI

Ingrid was introduced to abdi Ltd while they were affiliates of the ROI Institute and therefore learnt the Phillips' ROI Methodology™ and subsequently the changes that have occurred in the ROI approach. At the time IB used an internal measurement system that focused on collecting numbers (scorecard). *"...what I liked was that the monitoring and evaluation was not based only on scorecards numbers, which certainly didn't provide the impact which we created. And that's why I liked the approach, because it was really about catching up and capturing impact and collecting data to demonstrate impact and not just numbers and audience figures."* [Ingrid, interview]

She revealed that when she and her team described the approach to their project managers *"...they get it really very easily, with no problem at all. We don't need huge explanations, just a few examples for each level from their delivery, from what they're doing on the ground, and they understand it. And also they liked it and find it useful."* [Ingrid, interview]

Applying the ROI approach

Similar to many other international development organisations, IB also used the logical framework approach (LFA). Ingrid shared that they had five or six outcomes or success indicators for her programme. They then developed their logical framework (workframe), incorporating and embedding the ROI approach up to L4. *"...in this way we embedded ROI. It's part now of the logical framework, but it's also part of the way we collect data to monitor and evaluate the programme...So if you see*

we have eight outcomes now. And basically they are located, they are explained as part of the chain of, chain of impact: level one, level two, three, four. We don't go further.” [Ingrid, interview] Ingrid explained that they required figures (numbers) at L5, which they did not have and the monetized benefits for their area of work were not credible. She also added that the approach was “...also part of the way we collect data to monitor and evaluate the programme.” [Ingrid, interview]

The programme that Ingrid managed sought to bring key stakeholders together to enable communication and collaboration in vocational education. This meant that the programme was delivered at different speeds in each country because of each country's underlying infrastructure. During Isaiah's third interview, he gave this programme as an example of how the approach was applied in IB, particularly the use of delivering incremental outcomes at the different levels. “So I know that programme is helping through the evaluation framework and the levels to discuss with the project managers in the countries, ‘okay, how far do you think you're going to get this year, how far do [...] in two years’ and measure to that level and choosing tools that help, that measure where they think they'll get to. While in some countries they believe they'll move a lot faster and where they could be looking at sort of tracking all levels within one or two years.” [Isaiah, interview 3]

Ingrid and two senior members of her team completed the ROI courses. Recognizing that their in-country project/programme teams were under time constraints and would not be able to attend the 2-day Foundation workshop, they developed a training programme for them. She worked with her senior team to develop the training programme and then with one of these persons for the pilot, splitting the five countries between them. They organized three teleconferences for one hour each for country project managers and other managers they had from that country, as well as the regional project managers. Ingrid disclosed that they did not follow the format of ROI Foundation workshops but developed a practical training programme for their project managers.

To follow is a summary of these teleconferences:

Teleconference 1: “...we explained firstly the purposes and the outcomes and basically the logical framework ... what our purpose is; what we want to deliver. We went through explaining each of the outcomes: what is behind them and providing a few examples. And, of course, taking all kind of questions. We explained also on the first teleconference the chain of impact - level one, level two, three and four - in a very simple way.” [Ingrid, interview]

Teleconference 2: *"... we explained what monitoring and evaluation platform we developed and the support we can provide. We have very comprehensive guidelines – how to run an interview, how to collect data through questionnaires, and how to run focus groups. And also we explained, we guide them that for level one, level two, we prefer just questionnaires, interviews with important stakeholders to be used only for level four, because they're too busy people, etc., etc. And we also provide them with a bank of questions and we explain how they can modify them, etc. And it's explained, again within one hour."* [Ingrid, interview]

IB had a central online data storage system where documents can be shared between IB colleagues. Participants at the second teleconference were signposted to the relevant documents that were stored on this central system. *"... this is actually quite automatic. I mean, once you pick up the outcomes – they have to pick up two or three key deliverables for the whole financial year they are going to evaluate, because we cannot evaluate everything and anything and then they have to decide which outcome this actually contributes to. Once they choose the number of the outcome, automatically the template is populated with questionnaire, you have to use questionnaire, or interview, or focus group, and guidelines how to use them. So it's quite, quite easy."* [Ingrid, interview]

However, for some people this was difficult, therefore Ingrid and her team supported them via telephone. *"So we just picked up the phone and we talked through; we picked out together with the country project manager a few deliverables we're going to evaluate ..."* [Ingrid, interview] But she admitted, in a few cases *"I typed the evaluation plan for them, because it's much easier."* [Ingrid, interview]

Teleconference 3: The group of country and regional managers go through the evaluation plans.

Ingrid and her team member provided continued support to their country project managers after the third teleconference, especially when the time for key activities were approaching. This included development of questionnaires, analysis of the data, and decisions about the main conclusions. With interviews, Ingrid and her team member assisted their country project managers by interviewing some of the key stakeholders. Questionnaires and interview guidelines were tailored for the target interviewee(s).

Ingrid summed up their way of training: *"...we don't do the whole training, no. What we do is very practical ... [for their programme] this is the purpose, the outcomes; we are going to measure them against the success indicators; this is the chain of impact; and here is how the outcomes are mapped against the level one, level two, level three, level four. Here is the guidance how to measure and collect data in theory. And once this key activity is approaching then on one-to-one conversation we clarify what kind of outcomes they would like to achieve through this event and we come up with a final version of a questionnaire, or questions to be used in interviews."* [Ingrid, interview]

In addition to interviews, focus groups and questionnaires, for L3 they also used observations and action planning tools. Once the action plan is set at L1, it needs to be followed up on three or four months afterwards for L3.

Ingrid rationalised what happened at L5 and L6. *"We don't go to level five or level six because, in terms of, just to make this clear, in terms of the intangible benefits which are in abdi model level six, we collect data and we monitor them at each level, so even if we have a level one engagement event, like a workshop or conference, we still want to capture the intangible benefits for the participants from, for example, finding out about new networks, new initiatives, or anything else which is not part of our outcomes in the workframe and therefore it's an intangible benefit for us and our client."* [Ingrid, interview] She shared two of the non-monetized benefits she had encountered in her programme – 1) a participant said, *"... 'but when you can see how they engage, how they work together, etc., this is really, this makes me feeling that my job is really worthy'."* [Ingrid, interview] and 2) she observed herself that in events that included communities who did not speak to each other, *"... when you put together young people from different communities they work brilliantly well together, still their communities live segregated."* [Ingrid, interview] These benefits were not part of their targeted outcomes but were add-on benefits of delivering the programme, which they included in their reports.

Isolation was a very challenging part of the approach to implement. Ingrid expounded on this, saying *"...here is the area where, actually, we always have problems. To isolate the facts and to engage the external people into these isolation techniques, they don't understand it; they don't take it. As a result they say things just to please us, but it's not credible. And again, in terms of isolation I would say, I'm not sure whether we're right."* [Ingrid, interview] Nevertheless, questions that sought to determine the impact of the programme were included in their bank of questions, with guidelines.

"...the questions are, what are the external factors contributing to the same, say, change or whatever the situation is and the evaluation is about. And we ask about their estimation in terms of percentage of the attribution of the product of this change. The third question: how confident are they in terms of percentage. And in this way we want to calculate the things. What happens is that usually when we talk with the people we give them attention to and it is our external stakeholders who want to be engaged with us longer and longer who are part of some big events and really position themselves for other things. They want to please us. And they say a big percentage. And very often it's not... I can see that they just want to please us and I don't think it's a very credible way." [Ingrid, interview]

This was similar to the difficulties faced when project managers were asked for their views on impact. *"... it's even more subjective, because the project managers also want to say how important they've been in contribution to these processes and these changes."* [Ingrid, interview] Focus groups participants also tried to please them by giving responses they thought they wanted to hear.

Ingrid did not believe that control groups would be suitable in her programme, nor the other isolation techniques, namely trend line analysis and forecasting. At the time of this interview, the ROI approach did not yet include regression analysis.

This programme was seen as a champion for the ROI approach in IB. *"I think it's good now that we have this new approach to understanding the impact of the programme delivered cooperatively so it's part of the outcome reporting from the corporate planning to the team. We have the support. ... So this enables really us."* [Ingrid, interview] Both Isaiah and Ian made references to this project in their interviews.

Challenges to applying the ROI approach

A major barrier Ingrid identified was the time available for staff to commit to M&E. She explained that that the time for project management was reducing and that there were offices still restructuring. *"People want to be part of the monitoring and evaluation and do it properly, but they don't have time – a clear barrier. Otherwise, once you explain the chain of impact they like it. And they're happy to start doing something. And that's why we developed this platform to make it as easy as possible."* [Ingrid, interview]

Ingrid and her team established and developed an online M&E platform, which was shared through their central sharing system. All the countries that were implementing the programme could access this platform. This was where their bank of questions was kept, as well as M&E templates. In addition, the platform used Excel to automatically calculate the data. They also developed roles and responsibilities for the country project managers, country project assistants, and the UK colleagues who provided support for the programme.

Nevertheless, sometimes colleagues from a country have used the bank of questions without tailoring it to the event. *"... it's too generic, it doesn't say anything to our external stakeholders. They put them off. ... they are really generic because we have to encompass everything we do in 28 countries and it says, as a result of this, 'do you find the theme of this event relevant to your organisation?' But you can't say, 'the theme of this event', ...you have to adapt it. And this is what is difficult to do ... with 28 country teams. They have to do it themselves, but they don't in some cases. And then it's the wrong way of doing it. Better not to collect data."* [Ingrid, interview]

There were a number of other challenges. These included the frequent changes of policy decision makers in the countries they worked in. *"Well, in many cases, 75% of the policy decision makers in those countries we work with have been changed..."* [Ingrid, interview] Where they remained, they faced other challenges, such as no or unstable governments, or that the approval had to come from a higher level. Added to this, she believed that her programme was different from other applications of the ROI approach, such as training, rather her programme *"... is about influencing sometimes policy changes; it is about influencing new priorities in the countries. And there are really numbers of other big players who also work in the same area."* [Ingrid, interview] Her project investment was a fraction of what these other projects were investing. This also made it difficult, especially for isolating impact.

Another challenge Ingrid faced was applying the approach at L3 to her sector. She explained, *"... the most useful technique is observation, because you know your stakeholders are doing this. They're developing this policy paper, they now put this skills development in their priorities, or a new stakeholder has been brought, a new employer to their policy development group. And you know about this change and you observe it as a country project manager. But going through details, which*

are job performance related to see how it has, how this, for example, has contributed to the job performance is not that relevant..." [Ingrid, interview]

Ingrid disclosed that she found action planning quite challenging, *"My experience is that they're not followed up. ... and that's why I'm saying, it's tricky because we did have and I have compiled this data: we have the action plans from all the countries ... none of them has followed it up. Yes, for various reasons. So again we are going back to the fact that people report these things. So we can tick level one engagement and commitment to actions and even actions formulated and defined well, but then where is the next level - the level three, etc.? So that's why I'm saying it's tricky. Because actions have to come at level three. They say they're commitment; they have their plans; they don't follow them."* [Ingrid, interview]

Although applying the ROI approach had been beneficial, allowing Ingrid and her team to develop their online M&E platform, it came with some concerns. *"Well, in principle this platform allows us to have better and more credible reporting and capturing data in a more consistent way, etc. But the downside is that we also capture the negative... the lack of impact, which the other ...[similar] programmes don't do it."* [Ingrid, interview] She expounded on the conservativeness of the approach to evaluation, particularly reporting impact, compared to other approaches used in IB. *"We are much more strict than them and we are losing, because we are losing the battle for everything: for the purchasing... because we're so strict, we're actually losing credibility, which is just the opposite. Yes. Because the other programmes, they don't do it: they're not so strict. They pick up on the extreme data, positive data, which is not in line with ROI, but it's nice and the people consider it and they take in on board and then even make the whole organisation aware of this extreme data for a certain project. And we look, [our programme is] too rigid, too strict and under-performance [is highlighted] because we have data for performance and under-performance. So I'm not sure we have to be so strict and so rigid in the future and I probably will be a little bit more relaxed in the future."* [Ingrid, interview]

Ingrid shared the experience she and one of her team members had where they not only included the country project manager but also involved senior management. They had an impact review meeting structured around the four levels. *"It was good review and it was quite informative for the*

future plans so we will continue in this approach with other countries. We can't make all the countries, but those which are high priority and they need review and they need re-planning.” [Ingrid, interview]

On reflecting about the changes she had observed in the pilot countries, Ingrid believed that there was much better planning now. Other countries in her team were now beginning to apply the approach. *“Yes, it's [the pilot] finished. And now we started introducing the new countries and just now trying to do the things better.” [Ingrid, interview]*

6.1.3 Unit C – Ian, IB

Background

Ian is a senior manager at IB and had been working with them in a variety of roles for many years, accepting his current role in 2009. Throughout his career he had conducted evaluation exercises on a number of projects, using other evaluation approaches. He reckoned that *“...instinctively, these approaches are common in Evaluation. You're always talking about different levels of impact, really aren't you? So you've got some horizontal axis of time and the vertical axis of the different levels and it's just a question of how you cut it up, really, and the way in which you address that.” [Ian, interview 2]*

Perceptions and Interpretations of ROI

Ian thought a good feature of the ROI approach was that *“... it provides a very disciplined framework for you to do that [evaluate impact], instead of the sort of sloppy thinking which can sometimes occur where you say, 'oh I think it is making a difference' but where? At what level and how?” [Ian, interview 2]* However, he believed that in international development *“...you're dealing with advocacy, lobbying or policy changes, so I think ROI works a lot easier in ... manufacturing situations for example or simple measures of change in work practices...” [Ian, interview 1]*

IB offered the ROI workshops as in-house courses. Ian explained that IB employees were encouraged to follow the training and general approach to return on investment. He recalled that

when he completed the course it included exercises from other sectors. *"I mean there are some quite good rather nice little exercises, which took me outside of my familiar zone. The way they do in manufacturing examples, I can't remember them all, but there weren't really of a social nature. They were more of a straight forward productivity issues, if only people were more like that."* [Ian, interview 2]

He added that they were also encouraged to complete the qualification to the Practitioner level. He candidly admitted that, *"...it is not an easy qualification and certainly doing the dissertation component, you know, ... that's quite an exacting piece of work and requires application. There is no way you can do it during work time, quite a few Sundays, put it like that."* [Ian, interview 1]

Ian shared that the logical framework approach (LFA), in particular the use of logframes, was *"...pretty much the standard approach at least in the development evaluation field"*. [Ian, interview 1] However, he believed that *"...the ROI approach runs parallel to the logframe approach and, it's not quite the same but its got overlaps and similarities."* [Ian, interview 1]

Ian talked about how learning and applying the approach had given him a different level of appreciation of certain aspects, in particular, at L1 – engagement. His previous work with the LFA did not expand on this area and therefore it tended to be measured as output. *"... in the kind of area that I often work, its down to evaluating training and you know you're looking at numbers who attend and participants, and so on, but that tells very little about their motivation and in fact it's a pretty poor measure of evaluation, just to look at the numbers attending a certain course."* [Ian, interview 1] He liked that the ROI approach encouraged measuring engagement and attitude at the very beginning. *"...I think its very much that if you're going to reach higher levels in the chain then there is not much likelihood unless you've actually got the right people attending the training and development. So I think it's a pretty fundamental insight and quite useful to have it."* [Ian, interview 1]

Another area was in *"... setting up level 3 and 4, level 3 is actually a tricky one because its often the assumption that one moves from level 2 to 3 fairly seamlessly but of course level 3 is beginning to look at organisational impact and it requires rather more time but its not an automatic connection."* [Ian, interview 1] These levels and the connection between them were looked at in the ROI approach. Ian explained that in his sector, this was quite difficult to do.

Applying the ROI approach

Ian shared a programme he evaluated using the ROI approach. However, he cautioned that, *"[i]t would be too grand to call it an ROI evaluation, it was more like a case study, you know."* [Ian, interview 2] The programme was based in a developing country and included a training initiative for over a thousand people. It comprised a number of case studies that was incorporated into his impact evaluation report, covering a wide area, such as social development, health development, and education. For these *"... you need a longitudinal approach, so you'd have to revisit in 5, 10 years. Nobody's got the time to do that and they [funders, commissioners, etc.] want to see the results earlier to establish value for money and justifiably make changes during the programme. You can make some statements about early signs of change and improvements."* [Ian, interview 1] Ian explained that, *"the pilot projects that he evaluated were designed more as **learning experiences** than a means to achieve **strategic impact or wider reform.**"* [Ian, email and assessment – Ian's emphasis]

For this project, although he relied on the case studies of the training participants, Ian also supplemented this with scored observations (L2), mentor/line manager feedback, focus groups, interviews and questionnaires (from end of course to six and 12 months later). The project was evaluated at all levels although Ian conceded that it was not a fully rigorous ROI evaluation.

The project report included a causality map that introduced different levels of monitoring and evaluation: analysis (development needs analysis), activities (training initiative, etc.), outputs, outcomes and impacts. *"The ROI process can be easily mapped on to this causality map and to the project's logical framework."* [Ian, abdi assessment] The V diagram was used to depict this mapping.

The objectives at each level were (these were taken from Ian's ROI Practitioner assessment and have been anonymised):

L1: 100% participants are motivated to improve their performance through new skills and knowledge in use of project approaches (including planning, feasibility testing and piloting) to bring about change; 90% top managers are aware and supportive of ...[the initiative's] drive toward closer

engagement with citizens and poverty issues; and 90% trainees participate fully in the programme and are open to a “learning by doing” approach including comparison with other countries in the region.

L2: 75% of Post Training Questionnaires show evidence of acquiring new information, learning and skills; 100% participants can identify new team skills and recognise how a less hierarchical/position-based approach can drive quality and performance improvement; and develop 10 new trainers [...] in experiential methodologies with appropriate skills and know-how.

L3: Human Resource strategy in place and statement of [the organisation’s] role and purpose agreed; Performance Based Evaluation System (PBES) in place, which is used for selection and postings of officers and rolled out to other organisations; 300 senior employees per annum received practical training in leadership & policy development; 80 employees graduate to higher leadership programme & second level projects; 55-60 projects per annum commissioned, implemented & assessed; training department faculty progressively assume responsibility and capacity to run the programme; experiential training/learning by doing is established at training department; quality of practice-focused training remains high and continued use of key elements e.g. projects, [...] and links to other Regional Training Centres; senior mentors from the organisation to drive and add credibility to implementation: 10 new per annum; and 70% of cohorts/batches applying new skills and approaches in their work within and between departments; e.g. consultation with external stakeholders, teamwork, etc.

L4: 2000 employees been through the programme; introduction of 10 new policies per annum, which are pro-poor, gender sensitive, evidence based and linked to projects or second level projects (high level strategic versions for best performing candidates).

Trend line analysis and experts’ estimation were used in this project. Ian thought that what “*was quite useful was to come up with degrees of confidence, percentage confidence that’s about the best you could do frankly but it’s a lot better than if you say, oh its an act of faith training*” [Ian, interview 1] However, he noted that “*... just because you put a confidence level on it doesn’t make it that much more solid. I mean it comes down to judgement at the end of the day with all of these things but at least you’re establishing some degree of certainty early on, if you’re trying to make a bold*

statement..." [Ian, interview 2] Control groups and forecasting would not be suitable for this project. Ian conceded that setting up a counterfactual is particularly difficult in his sector.

Direct costs such as international fees and national fees for consultants and lecturers, airfares, daily living expenses for participants, training facilities office running cost, logistics, study tours, equipment and publicity were collected. Indirect costs, such as time spent during training were estimated. The project also included an estimate for the cost of staff attrition. For benefits, "... *in this case are non-pecuniary or intangible and therefore difficult to measure.*" [Ian, assessment] Examples of non-monetised benefits were "...*time savings, reduction in stress levels, improvements in morale and confidence levels.*" [Ian, abdi assessment]

Ian listed a number of opportunities in the programme including a guiding strategy, having a trained cohort of employees, capacity developed in the training department and new work practices applied.

Challenges to applying the approach

Ian identified a barrier as "...*a high turnover of staff and culture of transferring staff too quickly before they are effective in their role.*" [Ian, assessment] Additional barriers included whether the head of the organisation would approve the draft or even if the project would be implemented, as well as the challenges of scaling-up or replicating the projects. There were also limited incentives to change.

Ian believed that IB was quite successful at tailoring the V diagram for the kind of work it did but when putting it alongside the LFA "... *you're superimposing the ROI approach and methodology over the top of it and you have to say, 'well, what does it add?' ... And I think it is an important point. I don't think you're really going to change the logframes substantially, the donors have been using it for years and it works.*" [Ian, interview 2] In his experience with other evaluators, however, Ian found that "... *there's quite a lot of people who find the logical frame rather constraining and as an organisation they've moved towards a theory of change approach. Now there is still nothing quite as neat as the logframe about that and you can do diagrams of the theory of change and that's quite helpful because it makes you sort of think, 'well what am I trying to achieve' and 'how am I going to do it', and 'what are the key issues involved, including stakeholders'?*" [Ian, interview 2]

While he can see the LFA and theory of change working alongside each other, he questioned what the ROI approach added over and above them. He liked that the approach examined engagement *"... clearly if you haven't got the right people in the room for your training or whatever your activity is, you're not going to realize your outputs or your top level impact, are you? So, its very obvious but that can be the make or downfall of many projects. So that's good."* [Ian, interview 2 and email] He believed that most approaches had a hard time moving from an individual level to *"...something which becomes institutionalised and part of the machinery or the fabric of the organisation, which of course takes a long time in the area of governance that I work"*. [Ian, interview 2 and email] Being able to track the impact of a programme over a number of years was quite problematic because *"...nothing stays still and there are multiple causes. Increasingly there is a move to look at contribution analysis and admitting, 'any result is not all due to our projects – there are other things that influence it as well', which is real but it is this basic sense that the further you get away from the point of delivery of your intervention, whether it's a course or project, the harder it is to measure attribution and to have a sense that there is any cause or link between the two"*. [Ian, interview 2 and email]

Apart from pressures from funders and commissioners to demonstrate/prove impact quickly, Ian shared some other challenges he faced. Donors tend to tell organisations like IB the evaluation framework they preferred, which meant they had to use that framework for their evaluation reports. Nevertheless, Ian believed that learning from the ROI approach could be included. However, when IB could decide on the evaluation framework they wanted to use *"there is much more opportunity to build in the evaluation process and design an evaluation approach based on our own logic model."* [Ian, interview 2 and email]

Other challenges included trying to determine and collect appropriate measures in the country where the programme took place. *"The sorts of measures ... [e.g.] broadcast, where we might employ measures such as numbers of press mentions and articles in newspapers. How can you measure improvements in awareness? There are ways of course but it is difficult and expensive to track ... I can't really claim that ROI changes the world on those sorts of things but it does make you think, well what's the best proxy that is available in these circumstances."* [Ian, interview 1 and email]

There were also the challenges with moving up the levels in the ROI approach. *"How do you scale things up? How do you really take something like training or any project change and be able to say, we, that's made a difference across a much wider sector. And I think the area I was looking at, which was donor-funded projects, is particularly prone to exaggeration as both the donor and recipient of technical assistance would like [to] have the evidence that their interventions are successful. The reality may not be that clear cut."* [Ian, interview 2 and email]

In his assessment, Ian reflected on his programme and noted, *"After level 2 there are several barriers to reaching level 3 and 4 which are not explicitly tackled. In other words the "theory of change" is insufficiently developed and there are assumptions made which do not hold up under scrutiny. The greatest of these is the assumption that somehow individual learning will automatically translate into wider action which will bring about institutional change."* [Ian, assessment]

The cost of following up with participants was high, especially when his programme did not have a sufficient budget to cover this. *"So, although I was the M&E [monitoring and evaluation] expert but I was based in the UK and only able to visit at maximum twice a year. That's a relatively expensive input, whereas if you actually had a monitoring and evaluation team locally, or even just one person to take continuous responsibility in this area, they could do much of the interviewing and follow up, particularly the gathering of data, which is hugely time consuming and difficult in many developing country cases. My role would then [be] to provide support and quality assurance."* [Ian, interview 2 and email] After completing his assessment the project underwent some major changes, which were aimed at reducing the cost of running the programme.

Ian reflected on his experience with the ROI approach in his assessment. *"Applying the simple model of a hierarchy of levels moving from engagement (Level 1) to learning (Level 2) to action/implementation (Level 3) and business impact (Level 4) and gathering data against each of these has proved enlightening. Each level of data tells you something as well as the cumulative data set."* [Ian, assessment]

6.2 Findings from the International Development Units

All the units in the international development context were prepared from one UK charity, IB. All three participants, Isaiah, Ingrid and Ian were being qualified for the Practitioner level and could be considered *experts* (Dreyfus, 2004) in the ROI approach. Isaiah and Ingrid had already co-presented (with a facilitator) at Foundation workshops for their colleagues. IB was working with abdi to have suitably qualified practitioners in-house so that they can take over their abdi Foundation award training. There were also plans for IB to eventually start offering this training to other organisations in international development as impact evaluation training. Isaiah provided the history of IB's implementation of the ROI approach, while Ingrid shared her experience evaluating a social change initiative in the vocational education setting, and Ian shared his experience evaluating a large L&D initiative in a developing country.

The international development context has a long history of evaluating their initiatives, largely in response to funders and commissioners to provide evidence that their initiatives are making a difference. As such, IB had developed its own performance measurement tool, a scorecard that captured its activities in its offices across the globe. They were also using the Logical Framework Approach (LFA) mainly on projects stipulated by their funders.

6.2.1 Perceptions and Interpretations of ROI

After being introduced to abdi Ltd, when they were using the Phillips' ROI Methodology™, Isaiah became convinced that the ROI approach could be used as a standardised way of evaluating the L&D initiatives and the kinds of social change initiatives that IB undertook since it incorporated a number of other techniques and had an educational foundation. Many of the initiatives in the international development context were difficult to measure, such as advocacy, cultural awareness and some social change interventions. Where it was difficult to measure impact, evaluating those initiatives using the ROI approach was still being resisted. While some projects, such as improving the quality of teacher training, may be 'easier' to evaluate, other projects, such as improving cultural relations can be quite difficult, if not impossible, and will therefore not be attempted.

The participants in this sector/context used ROI mainly to refer to the approach, even when it could be argued that it was unclear, e.g. *"...I can't really claim that ROI changes the world on those sorts of things but it does make you think, well what's the best proxy that is available in these circumstances."* [Ian, interview 1 and email] This reference could mean the metric or approach or even a metaphor.

In any case, the participants described the ROI approach as a disciplined framework for evaluating interventions to demonstrate that they were making a difference. *"... it provides a very disciplined framework for you to do that [evaluate impact], instead of the sort of sloppy thinking which can sometimes occur where you say, 'oh I think it is making a difference' but where? At what level and how?"* [Ian, interview 2] Using the approach allowed the practitioner to collect data that demonstrated the impact of their initiatives and provide more information to their stakeholders. *"...an approach that asked people to plan for, collect and report outcome data".* [Isaiah, interview 2] IB's scorecard only captured the numbers relating to activity. *"...what I liked was that the monitoring and evaluation was not based only on scorecards numbers, which certainly didn't provide the impact which we created. And that's why I liked the approach, because it was really about catching up and capturing impact and collecting data to demonstrate impact and not just numbers and audience figures."* [Ingrid, interview] While the ROI approach had a process at work: a hierarchy of levels from engagement (L1) to learning (L2) to action (L3) to impact (L4), each level providing information about what was happening as the initiative was being implemented. *"Applying the simple model of a hierarchy of levels moving from engagement (Level 1) to learning (Level 2) to action/implementation (Level 3) and business impact (Level 4) and gathering data against each of these has proved enlightening. Each level of data tells you something as well as the cumulative data set."* [Ian, assessment] The approach had also been described as *"...a simple concept, people get it academically, applying it consistently is hard work, it takes a lot of motivation."* [Isaiah, interview 2]

6.2.2 Applying the ROI approach

There had been some success in getting the ROI approach implemented in IB. These have occurred because the approach's main champion, Isaiah, was willing to adapt the way he promoted it. In addition, using their existing systems and building the approach on top of and/or alongside it had

helped to increase interest in the approach. There had also been increased demand for them to provide evidence of their impact from their funding partners.

However, it was clear that Argyris and Kaplan's (1994; Dreyfus, 2004) processes for introducing a new technical approach were not fully present in this context, although this may be changing. Relevant IB people were able to learn the approach (Argyris and Kaplan's Process I step 1: Education). Also, it could be said that Isaiah acted in different roles during both phases of implementation (Argyris and Kaplan's Process I step 2: Sponsorship). He was the Advocate and Change Agent in the Analysis phase and he acts mainly as Advocate in the Action phase. Although he did not have sponsorship from his senior management when he began implementing the approach, it could be argued that he is now also the Sponsor. Ingrid and Ian acted as Change Agents in both phases, while Ingrid could also be considered an Advocate since she promoted the use of the approach in her 28 countries.

Incentives were also not aligned (Argyris and Kaplan's Process I step 3: Aligned Incentives), i.e. there were very little organisational enablers (only the provision of the ROI course). Isaiah employed a bottom up approach, where project managers were targeted to be trained in the approach. But these managers applied defensive routines and resisted the implementation of the approach. Isaiah had to utilise other mechanisms to get the approach implemented in IB, such as changing the reporting format when he had the power to do so. In any case, the executive board was now requesting impact evaluations, suggesting that there may soon be sponsorship from this level.

It can be said that Isaiah is very deeply internally committed to applying the ROI approach in IB (Argyris and Kaplan's Process II); he has spent more than eight years championing its benefits. In addition to the immense time he has dedicated to getting the approach embedded, he has spent immeasurable effort and resources. Ingrid and Ian appear to be deeply internally committed, having spent considerable time, effort and resources to learn and apply the approach.

Table 12 summarises these findings.

Table 12: Argyris and Kaplan's Processes (International Development)

Steps	Isalah	Ingrid	Ian
Process I: Education			
ID needs gap	Isalah saw a presentation of the ROI approach and believed it filled an evaluation needs gap in IB.	Was encouraged to learn the ROI approach in the early stages of implementation.	Was encouraged to learn the ROI approach in the early stages of implementation.
Articulate new approach	He arranged for the ROI courses (initially Phillips' ROI Methodology) to be made available to IB staff.	Completed a ROI courses available to IB people.	Completed all ROI courses available to IB people.
Provide examples	Initially, conference presentation, brochures, leaflets and websites, later via workshops, workbook and book.	Initially, brochures, leaflets and websites, later via workshops, workbook and book.	Initially, brochures, leaflets and websites, later via workshops, workbook and book.
Process I: Sponsorship			
Phase 1 – Analysis	Advocate, Sponsor and Change Agent	Change Agent	Change Agent
Phase 2 – Action	Advocate and Sponsor	Advocate and Change Agent	Change Agent
Process I: Aligned Incentives			
Organisational Enablers	Provision of information: the ROI course.	Provision of information: the ROI course.	Provision of information: the ROI course.
Process II: Internal Commitment			
External	No	No	No
Internal	Yes, very deeply	Yes, deeply	Yes, deeply

As part of the change in how he promoted the approach within IB, Isaiah worked with abdi to develop a customised logic model specific to IB's needs. The model was useful for laying the foundation and depicting what was being attempted. Since he had met with much resistance, Isaiah sought out like-minded people to help him implement the approach, mainly in the field. In addition, initially it appeared that the added feature of being able to gain a UK qualification upon completing the course was an incentive, although this seemed to have diminished in recent years. Nevertheless, he believed that a key (intrinsic) motivator for his colleagues was being able to demonstrate that the work they did was making a difference. This was important for selling the ability to measure the impact work they did. To this end, Isaiah and his team were encouraging their colleagues to also meet to discuss their results, to discuss the data they were getting back and what it meant for them to get better at what they were doing.

Ingrid was one of the first to apply the ROI approach successfully, although not to L5 (ROI). Her project was being carried out in 28 countries but she pilot tested the approach in five countries first. She observed that there was much better planning in the pilot countries and they had embedded the approach as part of their workframe (logframe). She and her team developed an online electronic platform and trained relevant staff on the basics of the approach over three one-hour teleconferences. They were able to scale down the approach to an explanation of the purpose, outcomes, and success indicators that would be measured against, as well as the chain of impact (which had been incorporated into their logical framework), and their online monitoring and evaluation platform (and the guidelines). The project managers were also given telephone support but there were still occasions where they did not collect good quality data.

Ian's large-scale L&D initiative was used as his practitioner assessment, although he conceded that it could not really be called a ROI evaluation. His evaluation was carried out in line with the ROI framework and included a causality map with the ROI process being mapped to the project's logical framework and depicted in the V diagram.

Quite a lot of the projects that were externally funded came with stipulations that IB used a specific evaluation approach, e.g. the LFA. Within the international development context the LFA was extensively used (Dadd, 2013b). In both Ingrid and Ian's examples, it can be seen that the ROI approach had been superimposed on top of the logical framework.

At the time of the interviews, Isaiah had about eight years' experience working with abdi to embed their approach in IB. During this time his role changed and he eventually got a senior position where he could push the implementation of the approach by progressively changing how reports were prepared for their executive board. This helped to drive the implementation of the approach within IB.

6.2.3 Challenges to applying the ROI approach

The ROI approach was initially aimed at evaluating L&D initiatives, particularly training programmes. Applying it to social change initiatives, as carried out at IB, will of course lead to a number of challenges. The approach links the investment of a human capital initiative through the people who participate in the initiative to the organisation's performance. However, in this context the human capital investment is not trying to change the behaviour of the people to impact the organisation's performance. Instead, the investment is seeking to impact the people in a particular community and/or country in a particular social area. This is one of the key reasons the approach is difficult to apply at IB. These are two different types of service systems, which will be discussed further in chapter 7.

Another challenge is the culture of the organisation. Managers, such as those that were targeted to learn and apply the approach, do not carry much influence (Hampden-Turner and Trompenaars, 1994). As such, the bottom up approach to implementing this approach made it inherently challenging for the approach to be embedded. The executive board was a key stakeholder who needed to be engaged, especially in the Action phase (Argyris and Kaplan, 1994). In addition, although the British people were considered analytical (Hampden-Turner and Trompenaars, 1994), Isaiah shared that IB people tended to be intuitive, suggesting that IB's organisational culture (it's practices) reflected the context they were in, regardless of the national cultures of their overseas offices (Hofstede et al., 1990). They were also being asked to carry out detailed planning but would be more comfortable with ambiguity (Hampden-Turner and Trompenaars, 1994; Hofstede et al., 2010). Isaiah also pointed out that his colleagues preferred a more consultative style and instructions were an invitation for challenge and discussion. This was in keeping with the UK's low score on

Hofstede's power distance dimension (Hofstede, 1980; Hofstede et al., 2010). In essence, IB was undergoing a clash of cultures where on the one hand they had heavily invested in activity measurement and as a result their own scorecard for tracking these activities. On the other hand, Isaiah was trying to implement an approach that required an organisational culture change in the way they thought about and planned, collected and reported outcome data.

The objections not only came from IB's head office team but also from in country project managers, who were being targeted to do the actual implementation. They thought they were being asked to do something additional that no one else was asking for (especially their immediate management) and were suspicious about what the information would be used for. As a result, introducing the approach in IB was met with organisational defence routines (Argyris, 1994; Argyris, 2004; Argyris and Kaplan, 1994).

Nevertheless, IB had some success in actually applying the approach, particularly up to L3. Even so, they had difficulties where the initiative was aiming for L3 outcomes in a community/country. These outcomes were usually about a change in policy and could be observed when the targeted individuals produced something, e.g. a policy paper that demonstrated that the initiative had an impact on the individual's behaviour. However, these kinds of L3 behaviours were hard to capture in this context.

L4 and L5 have proved particularly challenging as well. Since the data for this level would pertain to the community/country it was understandable why they may have difficulty acquiring these. Evaluating to L5 included converting some of this data to monetary values. Although work was being done in this arena for some projects, another major hurdle to overcome would be converting to one currency for cross-country comparisons. Even so, they were able to use their existing global financial system to track costs, although only the UK-based staff logged their time to projects. For some projects, they would be able to monetize people's time (e.g. volunteer hours) but still faced issues regarding when the impact of the initiative had actually been realized. There was also a question of whether it was applicable to monetize volunteers' time; since only actual fully loaded costs should be collected in the ROI approach.

The projects in this context tended to be quite complex and very long. They were also influenced by a number of factors (e.g. governments, other donors, etc.) Therefore, attributing the results to IB's

initiative will be difficult. Since most of IB's projects had only been evaluated to L2 and L3, attribution was not relevant yet. Where a technique had been required, trend line analysis and estimation have been used. For estimation, a good feature was to use the degrees of confidence but this was also subjective. A problem sometimes occurred when the estimation technique was used with their stakeholders (including project managers and other partners who want to continue the relationship). They wanted to please IB and gave responses that were not credible. This issue was not unique to IB and was also faced by others within international development, see Dadd (2013a).

Many of IB's projects would not achieve their L4 objective until after the 12-month mark stipulated in the ROI approach. Being able to track the impact of a programme over a number of years was quite problematic because change was always occurring. The further away the evaluation occurred the less could be attributed to the project (Massy and Harrison, 2014). Therefore, the practitioners in this context have had to adjust this to suit their needs. They identified what could be realistically achieved in the year being evaluated, in relation to their final impact objectives, and used this as their objective.

In the international development context where these evaluations were taking place investing in human capital initiatives takes long to implement and for changes to be observed. Notwithstanding this, funding for these projects do not normally extend to evaluating impact after the funding stopped and when the impact could be observed. In addition, IB worked in a number of countries, each with their own government and political systems. As such, leadership changes in many of these countries occurred with such frequency that it affected the evaluation of the initiative. This was further exacerbated by a change in IB leadership for that country.

Evaluating using the ROI approach highlighted where a difference had been made following an intervention but the negatives were highlighted too. Other projects used evaluation approaches that were not as conservative as this approach, and tended to highlight anomalies in an effort to keep and/or garner funding. Ingrid was quite disturbed about this and felt that they were losing – the battle for resources and also credibility. She was considering whether to be as conservative as is advocated in the ROI approach. This issue sheds a light on the various evaluation approaches used within this sector/context, and even within IB, where not everyone was using one approach. Therefore, there will be discrepancies with results when basic standards are not agreed.

Some progress was made to standardize and internalize data collection tools in IB, e.g. their customer satisfaction questionnaire and their annual impact survey. It was hoped that further progress could be made in this area by creating data collection tools that were embedded within the initiatives so that they could automatically transmit the data required. Enhancing Ingrid's online monitoring and evaluation platform for other projects was another area for further development.

The ROI approach highlighted financial results but this does not mean that IB will necessarily select projects based on those that could demonstrate the best rates of return. If it did, this would prevent IB from fulfilling its mission as a charity. Even so, the international development context is facing increased pressures from funders and commissioners to manage their performance for efficiencies and effectiveness.

IB is a large organisation and therefore any organisational culture change would take immense time. They did not have a learning or analytical culture. In addition, a bottom up approach was undertaken that encountered resistance. Identifying, engaging (winning over) and setting up key colleagues as champions took time as well. Isaiah shared that during the time the approach had been implemented in IB, it had gone through phases where there appeared to be high momentum behind it, which then dropped off and then started to build again. The approach itself had changed during this period and these practitioners had to learn the new features while still trying to get it embedded within the organisation.

6.3 Chapter Summary

This chapter presented the three units in the international development context from one UK charity, IB (Isaiah, Ingrid and Ian) as well as the findings. The findings examined the Perceptions and Interpretations of ROI, applying the approach and challenges in applying the approach.

The practitioners in this context interpreted the ROI approach as a disciplined framework; a simple process that required consistent hard work to implement. It also required time and constant motivation to be properly embedded. The approach was difficult to apply in IB because it was hard to apply measurement to social change initiatives, i.e. it was difficult to quantify and monetise the realised benefits of these initiatives, and also to track the actual fully loaded costs. In addition, these initiatives were targeted at people outside of the organisation (the service system for this context is the community), therefore tracking their changed behaviour was challenging.

Nevertheless, even without senior management sponsorship and to some extent alignment to incentives, there had been some success since applying the approach. This occurred mainly after Isaiah was promoted to a position of influence. Practitioners were employing better planning techniques and were able to demonstrate the difference their work made. They were also making adjustments to the approach to fit their context. These included juxtaposing the LFA alongside the ROI approach, breaking up long projects into achievable 12-month outcome objectives, re-defining L3 outcomes, as well as developing an online platform and practical training for their colleagues. The approach was taking long to be embedded in IB because (similar to the health service context) IB is a very large organisation. Making cultural changes will take time, especially since the practitioners were learning the approach while they applied it to long, complex projects. This was further exacerbated with frequent changes to the leadership in the countries they operated, as well as with their own country managers.

7 The Ten Embedded Units – Findings and Discussions

This chapter discusses the findings from the ten units, drawing on the literature from chapters 1 and 2 to answer the research question: *How appropriate are financial metrics for evaluating human capital investments?* Using ROI as a case study, the discussion is presented in line with the research sub-questions. First, the Perceptions and Interpretations of ROI are discussed (research sub-question 1: *How is the metric and approach perceived or interpreted?*). Second, Learning and Applying ROI is explored (research sub-question 2: *What is involved in learning and applying the approach and, by extension, the metric?*), which includes an examination of what actually happens when the ROI metric is used within an approach to evaluate human capital investments. Third, Contextual Challenges of Applying ROI is presented (research sub-question 3: *In what ways do different contexts render use of the approach (and metric) more or less challenging?*). These lead up to a summary of the issue of appropriateness of ROI for human capital investments. The conceptual framework explained in chapter 2 will be used to guide the analysis of the data.

Before the discussions begin, an overview of the key similarities and differences across the three contexts/sectors is presented. This provides a backdrop for the discussion of the findings in the sections that follow.

7.1 Similarities and Differences across the Three Contexts – An Overview

Across all the contexts calculating the ROI of the investment in the human capital initiative did not appear to be the main objective for implementing the approach. Instead, the emphasis was on implementing a structured framework for evaluating human capital initiatives *at levels that were applicable to the particular circumstances*.

There were other similarities across these contexts. The participants reported becoming focused (in IB, becoming more focused) on demonstrating that their human capital initiative was 'making a difference' as well as seeing an improvement in their planning skills. It was observed that they all had a ROI Champion/Advocate (though not all were available to participate in this study) to spread the ROI message and a lot of emphasis was placed on getting all relevant staff trained in the

approach (even external stakeholders, particularly at HN). They also all reported an increase in discussions about data among staff. In addition, they each appeared to face similar challenges in accessing good quality data in a timely manner and were using technology to improve data collection. Reports of using estimation as an isolation technique were found in each sector/context. Finally, all units carried their applications of the approach through to level three, at least.

However, there were some differences (see Table 13). First, participants in the corporate (Company CG) and health service (HN) sectors/context applied the approach to L&D and process improvement initiatives, while in international development (IB) they applied it to HR and social change initiatives.

Second, how much learning the approach changed participants varied. After completing the ROI qualifications practitioners' reported that their perceptions of themselves changed, believing they were more "business savvy". Cory went further; reporting that at Company CG a consequence of this changed perception of self was that their colleagues' views of the LS team also changed. The team was now viewed as L&D experts who were accountable for human capital development investments and with whom discussions about the organisation's performance could be held. It seems likely that this shift occurred because his team used the V diagram (beginning at L4 – business impact) to help their colleagues ascertain if training was the solution to the problem identified (Unit A – Company CG, Cory and Chloe). By contrast, such changes were not reported by other ROI practitioners – who generally began by planning the initiative from the behaviours it had been assumed needed changing (i.e. L3 – application and implementation). For example, at Company CI and HN practitioners were asked to provide L&D solutions to a problem identified by other colleagues, such as operations managers (see Unit C – Company CI, Cynthia and Carla and Unit B – Harriet, HN). They were not asked to help identify a solution to an organisational issue or opportunity. Instead, these participants in the study tried to connect the L&D event to an organisational opportunity or need *after* training was decided to be the solution by an external stakeholder. What Cory and his team did conformed to the prescriptions of the ROI approach in which planning should always start at the service system level (L4), by first ascertaining the problem or opportunity being targeted (Massy and Harrison, 2014).

Third, how far participants were able to proceed in collecting cost data and in monetising benefits varied considerably. Although the emphasis was not on calculating ROI in each unit, most of the participants planned to or were collecting cost data (all except Company CI). However, the capability for monetising benefits was more challenging, particularly in the international development context but steps were being made to address this issue (Unit A – IB, Isaiah).

Fourth, although the importance of attributing the benefits to the initiative was accepted in each context the actual use of isolation techniques was not undertaken robustly, except at Company CG. This appeared to be seen as an advanced part of the approach that would be developed later as the approach was further embedded in the organisation (Isaiah, IB).

Not surprisingly, the participants' experiences of applying the approaches were conditioned by differences in their contexts. The health service and international development contexts both have large, long and complex projects. As a result, steps had been taken (particularly at IB, who also use the LFA) to breakdown these projects so that achievable outcomes can be set and evaluated against annually over the life of the project. Participants in both of these contexts (Hannah, HN and Isaiah, IB) used data in their communications with stakeholders, to encourage them to talk about what it meant.

Company CG in the corporate context was the only organisation that had senior management support and was incentivised to implement the approach (more on this in section 7.3). The other organisations began implementing the approach from the middle and bottom (junior management) levels, mainly from within one department/unit. As such, they employed various techniques to gain stakeholder engagement, e.g. negotiating with stakeholders who have shared interests, networking with existing stakeholders and intrinsically motivating colleagues to participate. In addition, there were frequent changes in personnel and external stakeholders in the health service and international development contexts; therefore, stakeholder engagement was a continuous activity.

These participants were all from very large, multinational organisations but the source(s) of differences faced by each could be attributed to the types of organisations they were and the sectors/contexts they operated in. The ROI approach was developed to fill a need identified in the corporate context pertaining to evaluating L&D initiatives; being able to ascertain the value for money

of these interventions and the difference/impact they had on the business (Massy and Harrison, 2014). This is still the emphasis for the organisations from the corporate context in this study, Companies CG and CI but more so at Company CG. Company CI was not yet focused on calculating ROI (L5) because of the challenges anticipated for collecting cost data, especially with their global accounting system. However, they seem to believe it may be possible at some point in the future.

By contrast, the health service (specifically the NHS) has attempted to adapt and/or adopt a number of management techniques and methodologies from the corporate sector, e.g. improvement efforts such as lean management (Burgess and Radnor, 2013) and service redesign (Storey and Holti, 2013). However, implementation of these have proved challenging possibly because of the highly political, complex and fragmented organisational setting, with its powerful professional groups and regulatory systems (Radnor et al., 2011; Storey and Holti, 2013). This may also explain the slow progress with applications of the ROI approach at HN.

Within international development the need to demonstrate the impact of initiatives has become part of the espoused theory of many organisations, leading to the promotion of numerous evaluation approaches as discussed in chapter 1. Even so, the difficulties inherent in trying to measure the impact of interventions undertaken in this context are considerable (Chelimsky, 2013; White, 2009). Such challenges also faced practitioners trying to implement this ROI approach.

Table 13: Differences by Context

OBSERVATIONS	Corporate	Health Service	International Development
Applications of the approach (*Within the organisation but not among the case studies in this research)	L&D and Process Improvement*	L&D and Process Improvement	HR* and Social Change
Changed perceptions of own role	Yes	Yes	No (N/A)
Reported changed perception of role by rest of the organisation	CG	No	No (N/A)
Stipulate evaluation requirements from external stakeholders	No	Yes	No
Start planning from level 3	CI	Yes	No
Use of 360° feedback at level 3	Yes	No	No
Start planning from level 4	CG	No	Yes
Evaluate to level 5 (attempts)	CG	Yes	No
Concerns that projects would be compared using the ROI metric, resulting in adverse outcomes	No	Yes	Yes
Collecting cost data (*use abdi cost template)	CG	Yes*	Yes
Monetising benefits	CG	Yes	Plan to
Attribution techniques	- Control group (at CG) - Estimation (CI, if used)	- Trend Line - Estimation	Estimation
Use of shared IT systems	- CRM - LMS	Stakeholder's system	Online platform (proprietary)
Extending the 12-month maximum evaluation period	No	No	Yes
Large, complex and long projects	No	Yes	Yes
Use of other evaluation approaches	No	No	Yes
Identify applications where ROI approach is not suitable	No	No	Yes
Possibly affected by national culture	CI	No	No
ROI Network	No	Yes	No
Promotion of abdi UK qualification	No	No	Yes
Drive for the implementation of the approach	CG (top) CI (middle)	Middle	Middle
Frequent changes in stakeholders	No	Yes	Yes
Stakeholder engagement approaches	Negotiation	Networking	Intrinsic motivation

7.2 Perceptions and Interpretations of ROI

This section discusses the findings from the study relating to the first research sub-question: *How is the metric and approach perceived or interpreted?*

7.2.1 The Three Main Referents of 'ROI' – metaphor, metric, method

This study confirms previous research that showed ROI has a number of interpretations (Botchkarev and Andru, 2011; Millar and Hall, 2013). Three interpretations of ROI were identified – as a metaphor, as a metric, and as a method (approach/framework) (see Figure 10):

1. ROI is an expressed aspiration and commitment to value, for many practitioners it is rhetoric for getting returns from an investment or getting value for money. This is the more general interpretation used, which could also be a reason different applications of this metric arise in practice (e.g. ROI of Marketing (Rust et al., 2004), ROI of Social Media Marketing (Fisher, 2009) and ROI for evaluating Information Systems (Botchkarev and Andru, 2011)).
2. ROI is a metric for calculating whether investments of money or time (specifically Cynthia, CI) had provided any returns to the investor. This is the term generally used by the accounting profession and at boardroom level. In the ROI approach, an accounting formula is used that places emphasis on realised monetary benefits and actual fully loaded costs. It was formally introduced on day 1 in the ROI Foundation course, see Appendix 5 – Observation: Workshop Outline (A2a) and the workbook (abdi Ltd, 2013).
3. ROI is a term/concept used to discuss a method or framework (such as abdi's approach or Phillips' methodology – participants who were introduced to the latter method tended to use the term 'methodology'). This interpretation emphasises linking the initiative being invested in to the service system's performance. Therefore, 'applying ROI to human capital investments' is conceptualised as 'implementing a process/framework', one that could, in principle, demonstrate that investing in a particular human capital initiative has provided value for money to the organisation making the investment or impact on to the community the investment is being made for. It is about developing a discipline for

collecting data on the costs and benefits of that investment to be used in demonstrating the value for money by inputting these data in the ROI formula. Hence, the last interpretation encompasses the first two interpretations (as depicted in Figure 10).

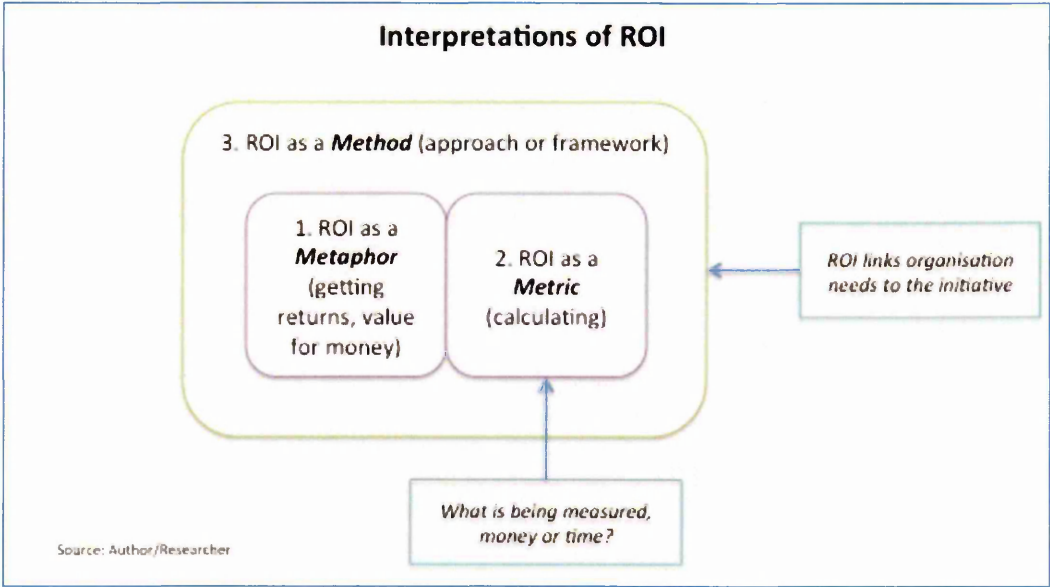


Figure 10: Interpretations of ROI

The interpretations of ROI were similar across all the contexts and might have arisen during the process of learning and applying the approach that the participants went through. Examples of participants’ use of these interpretations can be seen in Table 14. The participants in this study were either L&D or M&E practitioners. They each brought their own theories of action from their communities of practice (L&D and M&E) to *ba*, i.e. their respective sector/context (Argyris and Schön, 1974; Ichijo and Nonaka, 2007; Wenger and Snyder, 2000). This possibly had some effect on how ROI was interpreted. However, how much these interpretations were as a result of their own theories of action (theories-in-use and/or espoused theories) or the ROI training is unclear. For example, a facilitator was quoted saying, “ROI answers the question - was it worth doing and doing it in that way? Was it worth spending the money we spent to achieve those results. Even if we get great outcomes, was it worth doing, did we get value for money?” [Facilitator, workshop day 1 Corporate] In this quote, all three interpretations can be seen: “ROI [as a method/approach] answers the question...if we get great outcomes [as a metric, specifically a positive ROI in this case], was it worth doing, did we get value for money [as a metaphor]?”

Table 14: Examples of ROI Interpretations

ROI	Corporate	Health Service	International Development
Metaphor	<p>"We don't record it very well but there is definitely signs of ROI there..." [Calvin, interview 2]</p>	<p>"We were thinking we would be able to show a return on investment in terms of fewer errors..." [Hazel, interview 3]</p>	<p>"...I can't really claim that ROI changes the world on those sorts of things but it does make you think..." [Ian, interview 1 and email]</p>
Metric	<p>"...are we anywhere near having, if you like, an ROI on everything that we deliver?" [Cory, interview 1]</p> <p>"...we've had a range of conversations with our financial people and the keepers of key ...And, we do return on investment" but they're not talking about on training." [Carla, CI, interview]</p>	<p>"I'm just thinking in terms of competitive, as long as you're sort of demonstrating what the likely benefits are going to be, hopefully it wouldn't be just, well, [Hannah's] going to get 15%, and [Harriet's] going to get 25%, let's go with her initiative." [Harriet, Hannah and Harriet interview]</p>	<p>"...so it's still a negative return on investment but it makes it a more attractive program than originally but not compared to other programs." [Isaiah, interview 1]</p>
Method or Approach	<p>"The return on investment's okay, you get back what you put in as a return...At the end of it, there's a lot more variables that fit in that, and to achieve it there's a lot more structured planning that needs to take place." [Calvin, interview 1]</p> <p>"I became the kind of spokesman or driving force ideally on ROI..." [Cory, interview 1]</p> <p>"So to pursue the ROI project right the way through to level 5, feels like 'yeah, it would be nice to do that' but there isn't a real pull" [Cynthia, Interview]</p> <p>"I think a lot of what you read about ROI and a lot of the textbooks and the theories about ROI, it's quite text-heavy a lot of the time and you can get lost in the detail..." [Carla, interview]</p>	<p>"...Are we ticking bums on seats, [or] are we ticking changed behaviour, and that's what ROI does very well is change behaviour." [Hannah, Hannah and Harriet interview]</p> <p>"So, we've got a big challenge, really, as to how you talk to all of those different levels [of management] and get them to understand, and I think this is where we're battling with ROI a little bit." [Harriet, Hannah and Harriet interview]</p> <p>"one of the biggest challenges we found when we came into ROI..." [Harriet, Hannah and Harriet interview]</p>	<p>"...we were looking at what do we invest in staff development...this [the ROI approach] looked like a good way of understanding that better ..." [Isaiah, interview 2]</p> <p>"Because the other programmes, they don't do it: they're not so strict. They pick up on the extreme data, positive data, which is not in line with ROI, but it's nice..." [Ingrid, interview]</p> <p>"...in this way we embedded ROI. It's part now of the logical framework..." [Ingrid, interview]</p> <p>"...you're dealing with advocacy, lobbying or policy changes, so I think ROI works a lot easier in ... manufacturing situations for example or simple measures of change in work practices..." [Ian, interview 1]</p>

In addition, the workbooks express ROI using all three interpretations: **as a metaphor** “*It is an indicator of the value for money of investments in learning and development, HR...*”; **as a metric** “*ROI applied to human capital investments is: The net benefit from the investment ÷ the fully-loaded cost of the investment*”; and **as a method/approach** “*The value of using the abdi ROI recommended approach to track human capital investments...*” (abdi Ltd, 2013, p. 19). This latter statement continues by listing reported benefits of using the approach, such as assisting in “*planning, monitoring and reporting on complex social and economic projects and programmes*”, as well as enabling “*project commissioners and managers to communicate the outcomes and value more effectively to financial and operations managers, line managers, participants and beneficiaries*” (abdi Ltd, 2013, p. 19). Indeed, it could very well be that these interpretations are part of the process for learning to apply ROI. That is, during the training, the term ‘ROI’ is used in these three ways and so participants who have gone through the training subsequently adopt these usages.

It would appear that there was a cumulative process occurring during the learning and application of the approach. As practitioners went through this process they developed different interpretations of the approach and became increasingly committed to applying it on the job because of the benefits these interpretations suggest they could achieve.

7.2.2 Reasons for Using the Method

Participants referred to two benefits of using the approach. First, the ROI approach studied was perceived as a change tool because it facilitated culture and behaviour changes (Hannah, HN section 5.1.1 and Cynthia, CI section 4.1.3). How credible is this claim, given that organisational culture is a broad term loosely used (Hofstede et al., 1990; Levin, 2000)? Nevertheless, it can be seen as a group’s shared knowledge and implicit meanings, its set of assumptions, beliefs, values, morals, customs, habits and behavioural patterns that guide its perceptions, judgements and actions (Cameron and Quinn, 2011; Ipe, 2003; Levin, 2000; Nonaka and Takeuchi, 1995; Schein, 2004; Trompenaars and Hampden-Turner, 2003). Schein (1996; 2004) differentiates between three levels of organisational culture (depicting the layers of an onion):

1. Artefacts – visible organisational structure and process

2. Values – strategies, goals, philosophies (espoused justifications); reflects the way a group wants to present itself to the public.
3. Tacit (or underlying) assumptions – unconscious, taken-for-granted beliefs, perceptions, thoughts and feelings; the ultimate source of values and actions and the essence of culture.

With these distinctions in mind, implementation of the ROI approach required some changes in the organisations in this study. These impacted the visible organisational structure and process (artefacts) for evaluating human capital initiatives, e.g. the types of data that needed to be collected to demonstrate the chain of impact. In addition, the participants needed to change their values and tacit assumptions (double-loop learning) about how they conducted these types of evaluations. Specifically, they had to reconsider the value/importance of their roles within the organisation and their right to access certain data.

In addition, the ROI approach facilitated behaviour change because of the inherent focus on changing the behaviour(s) of the learners/delegates in their human capital initiatives (L3). Properly applied, L3 SMART objectives target existing behaviour that requires change and these are measured against at some time after the initiative to determine if the behaviour(s) changed. This is an important feature that the participants talked about in each context, e.g. *“...being able to see how you’ve moved somebody from A to B, and actually a long way further beyond that. And through doing these investigations we’ve seen that and we’ve got some fantastic case studies and examples of how it’s made a huge difference, both sort of personally and professionally...”* [Harriet, Hannah and Harriet interview]. Hence, it seems that in these respects – by modifying shared daily practices (communities of practice) regarding evaluating human capital initiatives – application of the ROI approach did initiate some cultural change.

The second benefit widely reported was that this ROI approach studied was seen as a **planning and** evaluation method, not just an evaluation approach. It provided a structured framework that outlines a detailed process explaining what needs to be done to plan, monitor and evaluate the impact of human capital initiatives. The process is structured as a hierarchy of levels and therefore practitioners need to create a link between the levels, which is important in ‘capturing the journey’. As they learnt and absorbed the approach, the practitioners were given formalised, disciplined principles to

establish standardisation and consistency in planning and evaluating their human capital initiatives. Learning the approach provided these practitioners with a common language (Carla and Cynthia, CI section 4.1.3) (more on this in the next section).

The particular ROI approach studied appears useful for planning and evaluating initiatives involving changing people's behaviour, such as in service research, human resource management and international development. However, it is not a planning and evaluation tool for physical (manufactured or natural) or financial capital investments. It is suitable for human and social capital investments, where the change in people behaviours is being targeted, notwithstanding the difficulties in actually evaluating these.

For some practitioners it was a simple concept, once it was understood (Hazel, HN section 5.1.4 and Isaiah, IB section 6.1.1). Nonetheless, there was general agreement that it was hard to apply the approach in practice and to get buy-in from other stakeholders. For example, practitioners shared how they changed how they communicated with colleagues to get them to buy-in to the approach: *"What it taught me was, don't throw ROI down people's throats, change your language that it makes sense to them."* [Hannah, Hannah and Harriet interview] and *"I couldn't bring in the whole process and everything at the beginning so I just brought in something that said this is the kind of data, as an organization, that we need to start managing and collecting and this is how, this is a interrelationship between the different types... but I knew very well what I was doing – in that I was aligning it to the training offer that were available including through the ROI Institute."* [Isaiah, interview 2]

It seems counterintuitive that although the ROI approach was selected as a means to evaluate investments in human capital, hardly any of the practitioners in this study actually calculated the return on the investments (L5) in their evaluations. In any case, for some practitioners, it appears this was not their priority. Implementing the ROI approach was not really about applying the ROI metric to human capital investments but about applying a set of procedures to plan and evaluate an initiative. In fact, the recommendation from proponents of the approach is that evaluations should be measured at this level "where you can and when it is required" (abdi Ltd, 2013, p. 72). Even in Phillips' methodology this was the case; he explained that the target at this level is relatively small – a common target being 5% of all human capital initiatives, "reflecting the challenge of comprehending

any new process” (Phillips, 2003, p. 26). This begs the question, why are these evaluation approaches presented in terms of ROI when ROI calculations are not actually encouraged?

These types of investments in human capital can be hard to justify therefore use of ROI can give the impression that these investments are being measured in a way that can be communicated to key stakeholders. It seems then that ROI is being used to bridge a communication gap between certain stakeholders, especially between senior, financially oriented executives and L&D or M&E managers. As a bridging metric it facilitates discussions regarding the returns to the service system of investments made in human capital. However, with the tri-fold interpretation of ROI, discussions could be ambiguous. For example, the financial director may believe that the M&E manager has been able to quantify in financial terms the returns of a social change programme. However, the M&E manager may have only used an ROI approach up to an achievable level (say, evaluation sheets at the end of the programme to determine L1 and L2 outcomes). They are communicating but not about the same thing.

7.3 Learning and Applying ROI

This section discusses the findings relating to the second research sub-question, *What is involved in learning and applying the approach and, by extension, the metric?* Although none of the organisations in this study set out to implement the ROI approach using Argyris and Kaplan’s (1994) processes, they provide a convenient way to structure the discussion of the findings across the contexts. In addition, there were no organisation-wide implementation plans because the ROI approach was undertaken as a tool to meet specific evaluation needs, i.e. L&D and/or impact evaluation. Nevertheless, it is expected that where these processes are observed full implementation of the approach would be seen.

7.3.1 Education

The participants had varying degrees of experience learning and implementing the ROI approach, with Calvin, Cynthia, Hank and Hazel just learning the approach on one of the Foundation

workshops. The other more experienced practitioners (Cory, Carla, Hannah, Harriet, Isaiah, Ingrid and Ian) were all at some stage of acquiring further knowledge about the approach, most aiming to gain their Practitioner/Postgraduate Certificate. They were attempting to change their respective communities of practice – L&D (Companies CG, CI and HN) and M&E (IB) by changing their individual theories of action (theories-in-use and espoused theories). For example, within IB, the measurement theory-in-use concentrated on inputs and activities, while the espoused theory was focussed on outcomes and impact.

Argyris and Kaplan's Process I step 1: Education was seen in all contexts. Through the experience of learning and applying the approach participants recognised the need to involve relevant stakeholders in the planning and evaluation of the initiative. Therefore, having identified that the ROI approach filled the evaluation need identified within each organisation, efforts were and are being made to have all relevant stakeholders (within and outside the organisation) complete the ROI Foundation course.

Learning the approach gave these practitioners a different perception of their L&D roles, particularly in the corporate and health service, *"...the overnight switch then was, was Learning Services ultimately then were positioned as the learning and development experts, and therefore as a [group member] you don't dictate what you want in terms of training."* [Cory, CG, interview 1] This included a more measurement focus on their L&D interventions, which meant they were more 'business like', *'we've got a bit more business savvy through doing it [the ROI course]...'* [Harriet, interview 2]. They appear to believe they were experts in their own rights, who could take decisions that benefited the organisation. All of the practitioners reported success at evaluating to L1 (engagement) and L2 (learning and confidence), citing L3 (behaviour), L4 (business impact – i.e. service system's performance) and L5 (ROI) as challenging.

With regards to achieving the learning and skills objectives, practitioners/learners of the approach did not complete these objectives when expected (Bloom et al., 1956; Dreyfus, 2004) (the shaded areas in Table 15). Instead, they achieved these levels some considerable time later. The practitioners appeared to still be learning the approach at the time of the interviews. After the first workshop (Foundation Award), practitioners were expected to be at the 'application' level in the cognitive domain. That is, they should be able to apply the new knowledge to new situations.

However, Calvin, Cynthia and Hank who were all beginners reported difficulty comprehending the approach. Only Hazel felt she comprehended and could apply the approach, although her unit reveals that she had not fully comprehended the crucial aspect of ‘needs analysis’. The importance of needs analysis was discussed in the Foundation workshops observed but a process for conducting a needs analysis was not taught.

The participants were expected to be ‘competent’ after completing the second workshop (Evaluator Award). This means they should be able to adapt the approach to their particular situations (Dreyfus, 2004); make plans (e.g. what initiatives to evaluate) and decide on what is relevant for such plans (e.g. identifying stakeholders and required resources). Cory had just completed the Foundation workshop but had been applying the approach since Company CG began implementing it. He and the other practitioners (who had completed or were completing the Practitioner Award at the time of the interviews) were actually considered ‘experts’ by ROI facilitators. However, they each admitted they were still learning the approach about three years (Cory, Carla, Hannah, Harriet, Ingrid and Ian) and eight years later (Isaiah).

Table 15: Learning Domain Objectives (Bloom and Dreyfus)

ROI Foundation Award Workshop	ROI Evaluator Award Workshop
COGNITIVE DOMAIN (Bloom et al., 1956)	DREYFUS' 5-STAGE MODEL (Dreyfus, 2004)
Knowledge	Novice
Comprehension	
Application	Advanced beginner
Analysis	Competent
Synthesis	Proficient
Evaluation	Expert

Essentially, to learn and apply the approach (and achieve these objectives) the participants were converting knowledge through the explicit-tacit double act to change their theories of action about this kind of evaluation. This is a difficult process and possibly the main reason the approach was hard to implement. Participants commented that they had not encountered such a disciplined approach to planning and evaluation in their earlier experience (e.g. Hank, HN section 5.1.3). Some had never even heard of the ROI metric (reported during the workshops). Interestingly, this planning

issue is congruent with what Hofstede and his colleagues found, i.e. planning is not detail-oriented in the British culture, where ambiguous situations are the norm (Hofstede and Hofstede, 2005; Hofstede et al., 2010).

Nevertheless, it could be seen that when the practitioners learnt and then evaluated their initiatives in practice they were spiralling through the SECI model (Ichijo and Nonaka, 2007) (see Table 16). Conceivably, the process starts at *socialisation (S)*, i.e. tacit to tacit, when discussions with colleagues before and after the workshop are held. These discussions would highlight the need to evaluate the ROI of human capital investments and likely include possible approaches and courses. For example, Calvin, CG held discussions with other persons at CGLSD after he was appointed to his new role; Cynthia and Carla, CI both had continuous discussions; Hank held ongoing discussions with Harriet, HN; and Isaiah discussed with his IB team as well as other IB personnel. Also included at socialisation are the discussions between facilitators and practitioners (sharing their backgrounds and experiences) at the workshops. This was observed at all the workshops (A1 in Appendix 5 – Observation: Workshop Outline).

Next, the creation and use of workbooks and slides depict *externalization (E)*, i.e. tacit to explicit. ROI workbooks were issued to each participant and used at all the workshops. Bespoke workbooks were created for HN and IB, although HN's workbook was very similar to the general one used at Companies CG and CI. The third stage is *combination (C)*, i.e. explicit to explicit. This stage involves the creation, completion and marking of assessments, e.g. assessments were included from Cory and Calvin, CG; Hank and Harriet, HN; as well as Ian, IB. Finally, *internalisation (I)*, i.e. explicit to tacit, includes reflection, absorption and application of the approach. This means adoption of the ROI approach concepts in full or with changes. This could be seen for example, when Company CG restructured CGLSD; Company CI had begun restructuring CILSD; Hannah and Harriet made changes to how they evaluated L&D initiatives; and when IB initially restructured their HR department as well as how they integrated the ROI approach with LFA.

Table 16: Nonaka's SECI Model (in this study)

Modos	Conversion	In this Study	Corporate	Health Service	International Development
Socialization (S)	Tacit to tacit	Discussion with colleagues before, then after the workshop. Workshop discussions with facilitator and practitioners (sharing background and experiences) – observation.	Calvin, CG (for new role); Cynthia and Carla, CI Observation (see A1 in Appendix 5)	Hank (with Harriet), HN Observation (see A1 in Appendix 5)	Isaiah and his team, IB Observation (see A1 in Appendix 5)
Externalization (E)	Tacit to explicit	The creation and use of workbooks and slides.	ROI workbooks issued at the workshops.	Bespoke ROI workbooks issued at the workshops.	Bespoke ROI workbooks issued at the workshops.
Combination (C)	Explicit to explicit	The creation, completion and marking of assessments.	Cory and Calvin	Hank and Harriet	Ian
Internalization (I)	Explicit to tacit	Reflection, absorption and application of the approach – adoption of concepts in full or with changes.	Company CG – restructure of CGLSD Company CI – restructuring of CILSD	Hannah and Harriet – changes made in how they evaluate L&D initiatives	Restructure of IB HR department Integrate ROI approach and LFA

Participants experienced difficulties understanding the approach itself as well as implementing it. Theories of action from various disciplines were coming together in the ROI approach (accounting, finance, evaluation, HR, etc.), which undoubtedly contributed to the complexity of the approach. In addition, the difficulties participants experienced in understanding (SECI – internalization (Ichijo and Nonaka, 2007)) the approach reflected the changes in their governing values (double-loop learning). They had expected to learn a simple process (single-loop learning) but instead were required to change their Model I theories-in-use about planning, monitoring and evaluating initiatives (double-loop) (Argyris and Schön, 1974). In particular, being able to make the link between the levels (demonstrate the chain of impact) was found to be difficult.

In theory, to apply the particular ROI approach studied, first, the service system's performance that is being targeted needs to be identified (L4), then the behaviours that impact this performance that require changing needs to be ascertained (L3), followed by determining any new knowledge needed to facilitate the behavioural change (L2) and then selecting and engaging the right stakeholders to be involved (L1). Objectives for each need are then set. Data on the participants' performance, costs and benefits (both monetary and non-monetary) are then collected within each level during the implementation of the human capital initiative (L1 to L5), where L5 includes the calculation of ROI. In the ROI approach, this is called demonstrating the 'chain of impact'. This is depicted in the V diagram (explained in chapter 1 – Figure 1). All evaluations involving an impact on the service system (i.e. up to L4 and beyond) has to include an isolation technique so that the impact of the initiative can be credibly separated from other influencing factors to determine how much of the results could be attributed to that initiative.

However, in practice the chain of impact did not occur level by level. As discussed in chapter 1, the outcomes of L1 to L3 occur iteratively and appear to interrelate. In practice, L1 and L2 are usually collected at the same time. There also appears to be confusion about what is understood and actually applied in practice for L2. For Cory, L2 focused on knowledge, *"our test is only focused on knowledge, we don't actually have anything on our level 2 that is specifically focused on skills or behaviour or attitude."* [Cory, Cory and Chloe interview] While Harriet, HN monitored attitude throughout the implementation of her project. *"So every ten weeks somebody sits down with them and looks at their attendance, so we know what the level of sickness absence is, and we report it on that. We know*

what their sort of, if there are any on-going problems that have been documented, so if there's problems with attitude, and the motivation to actually get on with it." [Harriet, interview 2]

At L3, according to the theory, the focus should be on whether or not the participants apply the new knowledge to the standards set. However, as highlighted in section 1.3.3 unless there is a baseline for the behaviour(s) that require changing, how could the initiative be credibly accepted as the cause of the change in behaviour? Participants could already have the skills to behave in particular ways. For example, in Hazel's, HN (section 5.1.4) unit it could be seen that the participants may have already had the skills to carry out their jobs but they did not because of systemic procedures (the organisation of patient files). In addition, as pointed out by Hazel, HN (section 5.1.4) and Ian, IB (section 6.1.1) transfer of learning is not linear; L2 may not automatically lead to L3.

The use of a hierarchy of levels may have contributed to the difficulty in applying the approach in practice, although they are helpful for framing the points where measurement can take place (Tamkin et al., 2002). For example, Harriet HN (section 5.1.2) talked about initially trying to apply the approach in a linear way. Additionally, the interpretation of the outcomes used in the ROI approach at these levels suggests that these may be better interpreted as 'domains', as used in Bloom's (1956) classification of learning domains (affective, cognitive and psychomotor) and Tamkin's et al (2002) domains of experience (heart, mind and body). Therefore, SMART objectives are actually being set and measured against stakeholder engagement (affective/heart domain), knowledge transfer (cognitive/mind domain) and behavioural performance (psychomotor/body domain). These three domains could collectively be called *people performance* (see Figure 11):

1. L1: Stakeholder Engagement – Affective (emotions/attitudes, motivation, engagement/buy-in to the initiative)
2. L2: Knowledge – Cognitive (learning/knowledge transferred as a result of the initiative)
3. L3: Behaviour – Psychomotor (skills/performance/behaviours targeted by the initiative)

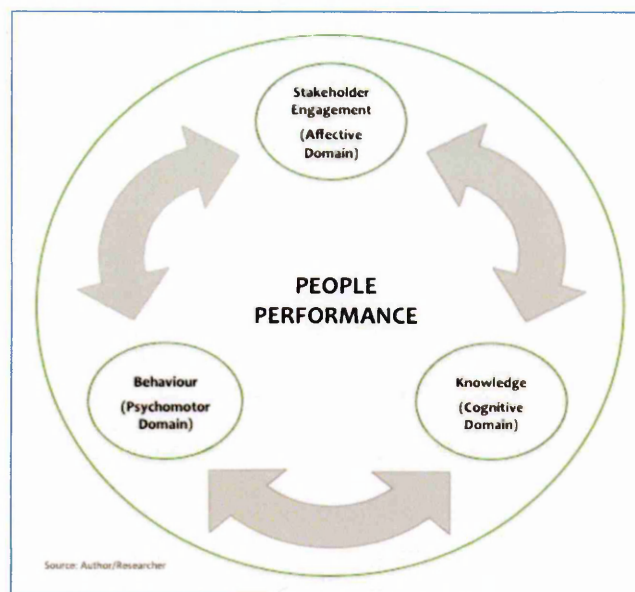


Figure 11: People Performance

7.3.2 Sponsorship

For Argyris and Kaplan's Process I step 2: Sponsorship, all the organisations were already in the Action phase at the time of the study. Therefore, Sponsorship should have already been secured from a senior manager or at the board level – someone who “can compel or legitimize a change in decisions” (Argyris and Kaplan, 1994, p. 89). Only Company CG displayed this. Even though Cynthia is senior manager at Company CI (section 4.1.3), her scope of influence is limited because of her area of responsibility (L&D). The push for ROI evaluations on L&D initiatives in Company CI was coming from Cynthia and Carla; their senior management team was happy with the results they were producing in their learning services department.

HN and IB were embarking on the journey from the middle or junior management level (sections 5.1 and 6.1). However, while this study was being carried out a job was advertised for a 'Business Case and Return on Investment Lead' in the NHS. This might indicate that ROI evaluations will be a more important feature in the future with more opportunities to gain the sponsorship required at higher levels in the NHS. IB's main ROI champion, Isaiah, was instrumental in getting the approach implemented (see section 6.1.1). He faced serious challenges possibly mainly because he did not have senior management sponsorship. However, as his status in IB increased through promotion he was able to influence the implementation to a greater extent. Nonetheless, at the time of the

interviews he admitted that although his executive board was now asking for impact evaluation they might not be talking about the same thing. Even so, since there were significant numbers of IB staff trained in the ROI approach this presented a good opportunity to gain sponsorship from his executive board for using the approach more widely.

Notwithstanding the lack of senior management support at Company CI, HN and IB, all of the organisations had 'ROI Champions' (advocates) who were passionate about getting the approach implemented, even recruiting other champions. For example, Isaiah shared that he looked for like-minded people, *"...and people who are looking to try out something new, make a mark, make a name, an early adopter type of people out in the field."* [Isaiah, interview 2]

The practitioners at Company CI, HN and IB were using other types of techniques to engage their colleagues. They were gaining stakeholder buy-in by appealing to intrinsic motivational impulses (*"... why they stay and why they're here is about the purpose and about the feeling and about the motivation people get through doing good things that work well and having a wider benefit and a non-commercial benefit. So we have to appeal to that part of people's attachment to the work."* [Isaiah, interview 3]), exploiting existing relationships with stakeholders – networking (*"so maybe we stick that on as an agenda item early in the new year and say this is what we're doing, this is how we're going to do it, we need your support on this, we need you to go and talk to people who have an influence on this because it's really important and this is why..."* [Hank, interview 2]), and by highlighting shared needs (*"...we need the HR data and HR are very interested in the fact that some of the stuff that they're doing very manually at the moment could well be managed with the LMS."* [Cynthia, CI, interview]). These practitioners were adapting the implementation of the approach to suit their own contexts. This was being achieved through a shared desire with their stakeholders to demonstrate that they were making a difference, especially with increased external pressures, e.g. from funders. Stakeholders would appreciate getting the data, being able to discuss what the data was revealing and using the data in their roles.

Efforts to secure 'buy-in' were not always or immediately successful. As reported, colleagues of these practitioners deployed varying degrees of defensive routines, such as blocking access to data. Examples included the finance department resisting sharing the organisation's performance data that is required for L4 (seen in the corporate and health service), as well as managers resisting

collecting follow up data from participants in the intervention for L3 (all contexts). Some were even suspicious of the reasons they were being asked to carry out this type of evaluation, *'well, no one is asking me for this, I'm not being managed on this, I'm not being asked to invest in it or pay money or spend time on it, my country director is not interested, my project/programme manager is not interested, why would I do it? You're telling me to do it and you're the only one telling me to do it and what are you going to do with this anyway?'* [Isaiah, interview 2] As discussed in chapter 2, these stakeholders appear to have felt threatened by the new approach and have in effect blocked and/or delayed the implementation of the approach (Argyris, 1994; Argyris, 2004; Argyris and Kaplan, 1994; Ballantine et al., 1998; Neely et al., 2000).

7.3.3 Aligned Incentives and Internal Commitment

For all of the organisations Aligned Incentives (Argyris and Kaplan's Process I step 3) provided an important organisational enabler – starting with the provision of the ROI information through funding the courses. This meant targeted employees were externally committed to applying the approach because this was the selected ROI approach being deployed within the organisation, except at IB where partners sometimes indicated the evaluation approach they required on specific projects. However, only Company CG also incentivised the CGLSD team by empowering them to decide on which L&D initiatives to undertake.

As regards Argyris and Kaplan's Process II: Internal Commitment, practitioners become committed to the approach either through external or internal commitment or both (Argyris and Kaplan, 1994). Argyris and Kaplan (1994) argue that creating internal commitment may be a requirement to overcome defensive routines. This depended, in part, on how much they believed the approach filled a need they identified in their roles. In the corporate context, Cory and Carla had the most experience with the approach and displayed their commitment by promoting the continued use (Cory – Company CG section 4.1.1) and the taking up (Carla – company CI section 4.1.3) of the approach. Cynthia (Company CI section 4.1.3) was immediately internally committed because of the need she identified within her department, i.e. they should demonstrate ROI for key L&D activities and later for the use of people's time. Calvin and Chloe were more externally committed because Company CG mandates

the use of the ROI approach (section 4.1.1 and 4.1.2). However, it seems that Calvin might become internally committed since he was starting to see benefits of using the approach.

Within the health service context, Hannah and Harriet appeared deeply committed to applying the ROI approach (sections 5.1.1 and 5.1.2). They had invested considerable time, effort and resources to learning and applying it in their jobs and were also training to get their Practitioner/Postgraduate certificates. Hazel was interested in learning the approach because of the benefits marketed, i.e. she would be able to ascertain the impact of her training courses on her organisation. However, Hank worked with Harriet and was asked to complete the ROI course (externally committed). For the international development context, Isaiah, Ingrid and Ian were all deeply internally committed – especially Isaiah who strongly believed the approach would address IB's evaluation shortcomings. He recruited 'like-minded people', such as Ingrid and Ian; his reputation was also on the line. They were all trained (or in training) to gain their Practitioner award and had committed to facilitating ROI courses within IB. Isaiah was the main advocate for the ROI approach.

As shown, the practitioners used their knowledge of the ROI method to influence their work colleagues (communities of practice). However, of the three contexts (and four organisations), all aspects of the Argyris and Kaplan's processes were observed in only one – corporate context (Company CG, section 4.1.1). Company CG had gone the furthest by measuring ROI (L5) on more than one project and had done so at an early stage in their implementation of the approach. One of the first projects evaluated was done in 2011, the first example Cory gave. See Table 17: Argyris and Kaplan's Processes (All Contexts – Process I (Stage 1)) and Table 18: Argyris and Kaplan's Processes (All Contexts – Process I (Stages 2 &3) and II).

Table 17: Argyris and Kaplan's Processes (All Contexts – Process I (Stage 1))

Steps	Corporate	Health Service	International Development
Process I: Education			
ID needs gap	<p>CG board/senior management mandated the LS department to ascertain the ROI of training.</p> <p>Calvin – recent promotion prompted him to learn the ROI approach (required for new role).</p> <p>Cynthia – personal revelation of the need to measure ROI of training, confirmed by Carla.</p>	<p>Hannah and Harriet – part of first cohort to participate in ROI course following HN's initiative to identify L&D training needs gap.</p> <p>Hank – ROI approach being used in his department; works with Harriet.</p> <p>Hazel – interested in evaluating L&D courses to determine ROI.</p>	<p>Isaiah saw a presentation of the ROI approach and believed it filled an evaluation needs gap in IB.</p> <p>Ingrid and Ian were encouraged to learn the ROI approach in the early stages of implementation.</p>
Articulate new approach	<p>The abdi ROI recommended approach was selected (initially it was Phillips' ROI Methodology).</p> <p>Calvin – signed up and completed Foundation course.</p> <p>Carla – completing Practitioner course</p> <p>Cynthia and the CILSD team completed the Foundation course.</p>	<p>The abdi ROI recommended approach was selected (initially it was Phillips' ROI Methodology) and funded by HN.</p> <p>Hannah and Harriet – all ROI courses</p> <p>Hank and Hazel – ROI Foundation course</p>	<p>Isaiah arranged for the ROI courses (initially Phillips' ROI Methodology) to be made available to IB staff.</p> <p>Isaiah, Ingrid and Ian completed all ROI courses available to IB people.</p>
Provide examples	Initially, colleagues (Calvin and Cynthia, via Carla), brochures, leaflets and websites, later via workshops, workbook and book.	Initially, colleagues (Hank and Hazel), brochures, leaflets and websites, later via workshops, workbook and book.	Initially, conference presentation (Isaiah), brochures, leaflets and websites, later via workshops, workbook and book.

Table 18: Argyris and Kaplan's Processes (All Contexts – Process I (Stages 2 &3) and II)

Steps	Corporate	Health Service	International Development
Process I: Sponsorship			
Phase 1 – Analysis	Advocate = Carla and Cynthia Sponsor = CG senior management Change Agent = Cory, Carla and Cynthia Target = Cory (initially), Chloe, CGLSD and CILSD teams	Advocate = HN Sponsor = HN Change Agent = Hannah and Harriet Target = L&D staff in HN	Advocate = Isaiah Sponsor = Isaiah Change Agent = Isaiah, Ingrid and Ian Target = Project Managers
Phase 2 – Action	Advocate = Cory, Carla and Cynthia Sponsor = CG senior management Change Agent = Cory, Carla and Cynthia Target = Cory (initially), Chloe, Calvin, CGLSD and CILSD teams	Advocate = HN Sponsor = HN Change Agent = Hannah and Harriet Target = L&D staff in HN, including Hank and Hazel	Advocate = Isaiah and Ingrid Sponsor = Isaiah Change Agent = Ingrid and Ian Target = Project Managers
Process I: Aligned Incentives			
Organisational Enablers	Provision of information: the ROI course. CG board/senior management empowered the LS team.	Provision of information: the ROI course.	Provision of information: the ROI course.
Process II: Internal Commitment			
External	Yes	Yes	No
Internal	Yes, CG's senior management, Cory, Calvin, Cynthia and Carla	Yes (Hannah and Harriet deeply, and Hazel)	Yes (all deeply – Isaiah, very deeply)

7.3.4 Summary: Individual Learning and Organisational Change in the Units

In this study, the participants reported ten features that could be considered milestones towards full implementation of the ROI approach (see Figure 12: Learning and Applying the ROI Approach). From these, two key features became apparent: these participants were 1) learning the ideas about the ROI approach and were eventually 2) changing behaviour (in themselves and others).

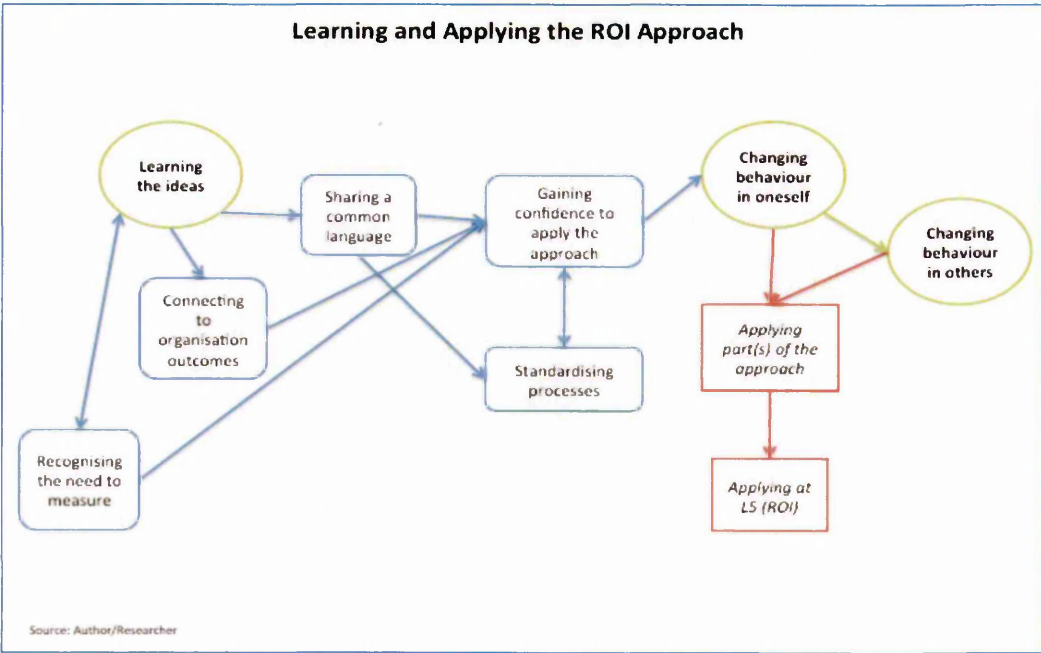


Figure 12: Learning and Applying the ROI Approach

For the most part, it appears participants already recognised the need to measure their initiative before signing up for the ROI course. However, in some cases the course was seen as a requirement for the role (e.g. Calvin, CG section 4.1.2 and Hank, HN section 5.1.3, as well as other participants in the workshops observed) – a double-sided arrow is used to depict these circumstances. Since they were now focused on measuring to demonstrate an impact on the organisation, they were more confident to apply the approach and to deal with the challenges encountered. With the exception of the three participants from IB, learning about connecting human capital investments to the organisation’s outcome targets was new and the ability to do this increased their confidence.

As more persons within each of the organisations where these participants worked learnt the approach, a common language seem to have evolved, which greatly aided their confidence in applying the approach (and defending it – Harriet, HN section 5.1.2). An important aspect of the

approach is the use of standard forms (e.g. questionnaires) and templates (e.g. cost templates). This translates to a standard way of working within these organisations, which also appear to have increased their confidence to apply the approach. A double-sided arrow is used here to depict that with repetition, processes become standardised leading to increased confidence.

After learning the principles of the ROI approach and increasing their confidence to apply it, participants seem to eventually begin to change their behaviour. They demonstrated this by predominantly applying parts of the approach to measuring the impact of their human capital initiatives. ROI (L5) was calculated in very few applications (only at company CG in this study, section 4.1.1 and to some extent Harriet, HN had begun steps to calculate ROI on her project, section 5.1.2). Although most of the participants did not calculate the ROI of their initiative they still found the content and principles of the approach useful, especially learning to focus more on the contribution of their initiative to the service system's performance (to find out the difference they made). The project management skills that were learnt from the course appear to have led to improved planning in all three sectors/contexts.

As has been shown, to determine the ROI of their human capital investments, practitioners needed to measure people performance. They also need to demonstrate the connection between the investment and the service system's performance. Measuring people performance is vital because this connects the human capital initiative to the service system's performance. Figure 13 is a depiction of how the ROI approach is actually applied in practice. L4 depicts the organisation's results/performance (or impact of the intervention on the organisation) in the corporate and health service contexts as well as the community for the international development context. Hence, this level is depicted as the 'service system' that is being improved. Figure 13 also includes the wider governance and management systems that are connected, e.g. financial systems and other performance management systems.

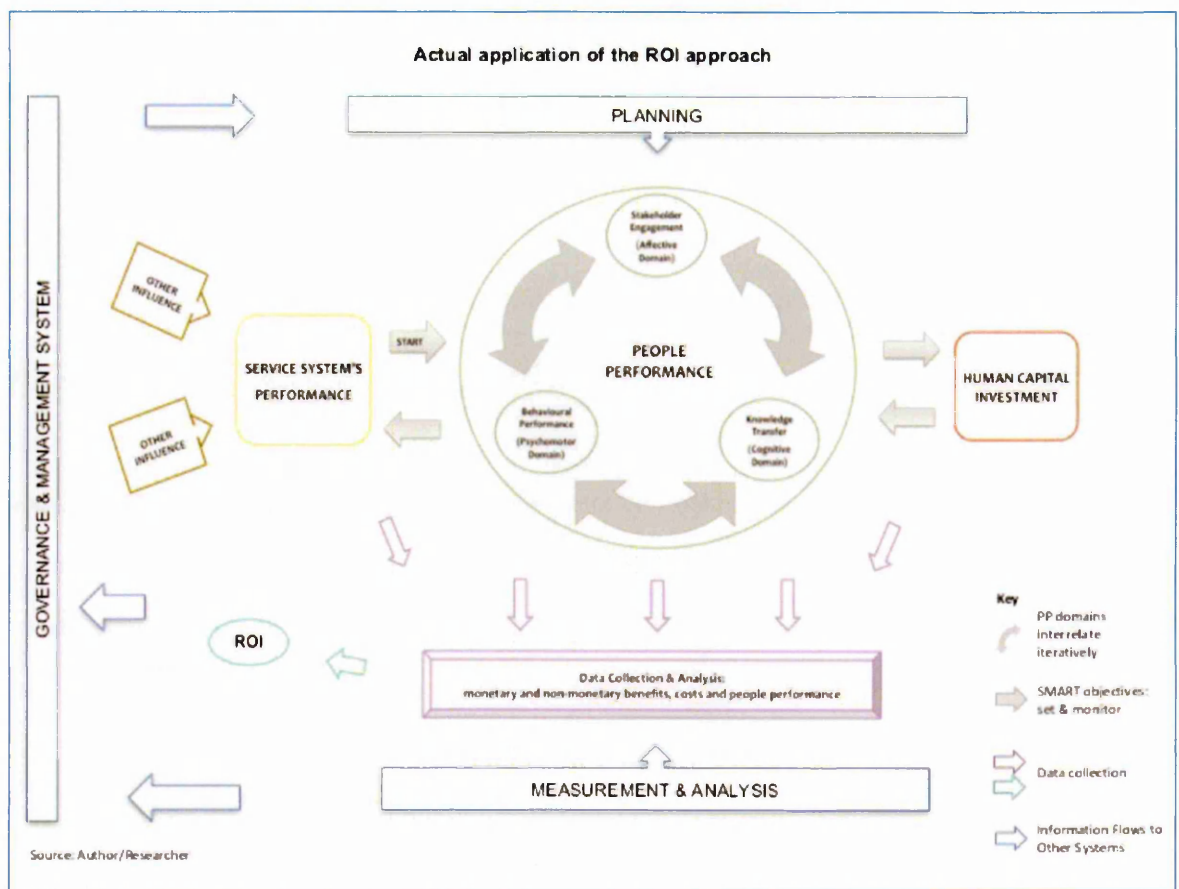


Figure 13: Actual application of the ROI approach

This study has shown that the key to calculating the ROI of a human capital investment is being able to capture data on actual costs and realised monetary benefits so as to provide credible evidence the investment impacted the service system's performance. This means demonstrating how participants (via the domains of people performance) were affected by the investment (the initiative) and, as a result, how the investment impacted the service system's performance.

To do this, measurement is approached at individual levels (Jaaskelainen and Laihonon, 2013) and in each domain of people performance, targeted SMART objectives are set and measured against. They need to show a clear connection between each other and link the initiative to the service system's performance. To be included in the ROI calculation, people performance data has to be isolated from other influencing factors. Therefore, it appears organisations need to have a structured management information system (MIS) to evaluate human capital investments. This MIS would complement existing systems that collect and analyse the service system performance data but would also include people performance data, as well as realised monetary benefits and actual costs.

The MIS would also need to be made available to evaluators/programme managers for human capital initiatives for them to carry out the evaluations.

7.4 How the ROI Challenges Varied in Different Contexts

The third research sub-question was: *In what ways do different contexts render use of the approach (and metric) more or less challenging?* The units were from three different sectors/context: corporate (private), health service (public) and international development (non-profit). There were two learning services departments from manufacturing organisations (manufacturers of automobiles and engineering products) in the corporate sector/context. The initiatives explored in the health service and international development sectors/context were from learning services and vocational education.

Service Dominant (SD) logic provides a unifying lens to view the experiences reported from these very varied contexts (Lusch and Vargo, 2014). (For an explanation and discussion about this logic, see Appendix 9 – Service-Dominant Logic.) Within SD logic, the basic unit of analysis is the *service system*. In this study ‘service system(s)’ are organisations (for the corporate and health service contexts) and communities (for the international development context).

The key to improvement is increasing competences (knowledge and skills) of the entities in the service system (Maglio and Spohrer, 2008). Vargo and Lusch (2008b, p. 33) advocate that firms should “recognize both employees and customers as valuable operant resources and invest in the development of both” (FP4). However, it is being argued here that this can be extended to incorporate other human operant resources that participate in service, i.e. all service participants (providers, acquirers and users): employees within the organisation, customers, guests, patients, family and friends of patients, and, as in the case of the international development context, volunteers and beneficiaries in the community who participate in the service. These groups of people are the human capital of their respective service systems (organisation or community). Investments in human capital are aimed at increasing competences in service participants in these service systems.

Figure 14 depicts the interactions of the service systems within the three contexts. The first service system shown (thin black circle) is the learning environment, the ROI workshop. In this system, ROI facilitators (ROI F) are the service providers (SP) and the evaluators (Ev) are the service users (SU).

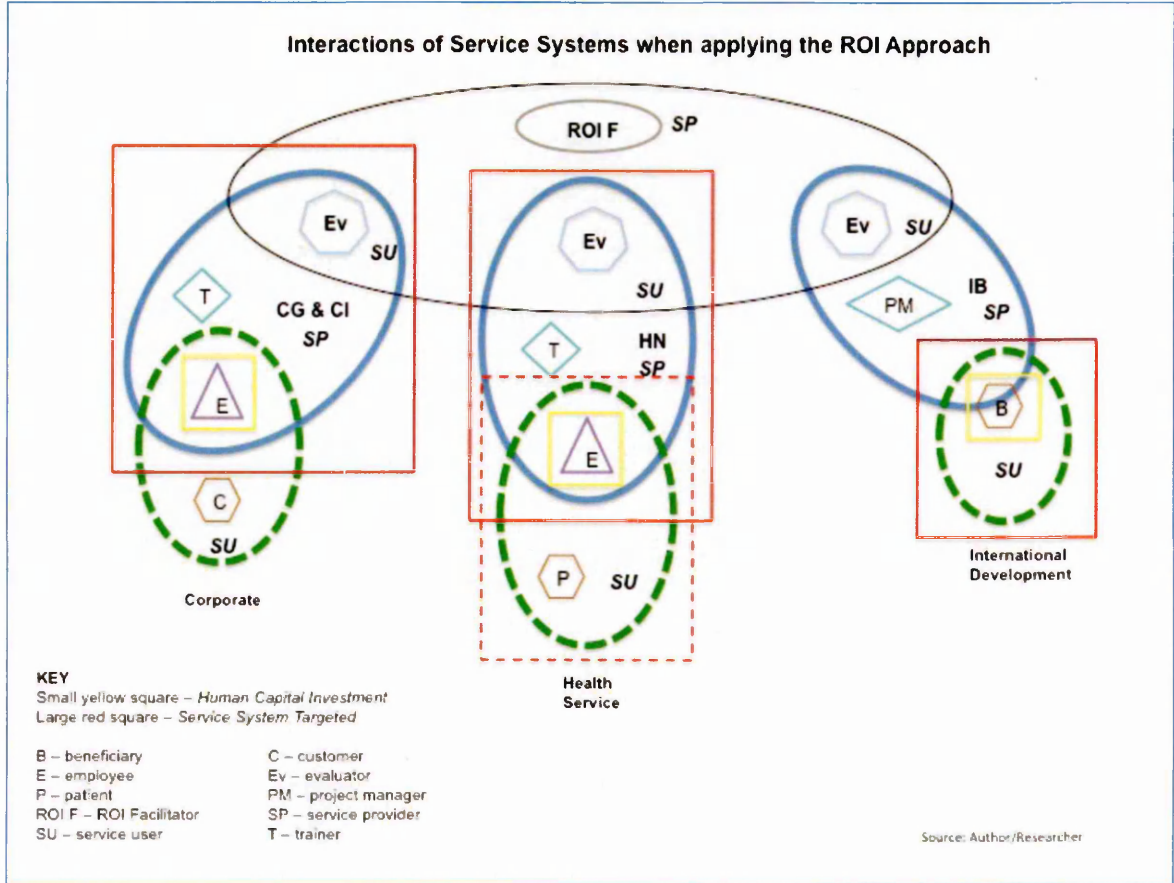


Figure 14: Interactions of Service Systems when applying the ROI approach

The second service system (thick blue circles) were the organisations (SP) in the corporate (Company CG and CI), health service (HN), and international development (IB) contexts. In this system evaluators (Ev) assessed the human capital initiatives carried out by the trainers (T) and project managers (PM). In some cases, the evaluators were also the trainers (e.g. Calvin) or project manager.

In the third system (dotted green circles) service exchange is taking place, e.g. in a retail shop, hospital or community centre. Service exchange happens between the service participants of the organisations (employees [E] who participated in the human capital initiative) in the corporate and health service contexts (SP) and the customer (C) or patient (P – service users [SU]). For

international development, the service participant (beneficiary [B] – SU) is involved in the human capital initiative directly.

The yellow boxes in the figure highlight the human capitals being invested in. In this study ‘service system’ refers to the systems that were receiving the benefits of the human capital investment and whose performance results were targeted, i.e. the organisations in the corporate and health service contexts and the community in the international development context (red squares). See Table 19: Whose Investments/Who Benefits? Although the service system of the health service context could be depicted as both organisation and community (shown with red dotted line), this was not seen in this study. For example, Hannah’s (HN) project was a multi-agency project to benefit the city/community but the project team focused on one agency/organisation for the implementation and evaluation.

Table 19: Whose Investments/Who Benefits?

	Corporate	Health Service	International Development
Investor	Organisation (Company CG & CI)	Organisation (HN)	Organisation (IB)
Returns on Investment	Organisation (Company CG & CI)	Organisation (HN)	Community (Various, globally)

As discussed in chapter 1, the ROI metric was developed to provide an indication of the rate of return of investments in physical capital. The metric incorporates data on the benefits of the investment compared with the cost of that investment. Generally, persons calculating this metric (e.g. finance personnel) have traditionally been trained to collect data on physical capital investments (Lusch and Vargo’s (2014) goods-dominant logic). Although labour costs would still be important, a change in thinking is required when applying ROI to human capital investments. Costs, such as utilities, equipment and materials, which are normally collected in current accounting systems would not be relevant.

The data required for human capital investments may impact the same performance results as physical capital but they are not the same. For example, Carla, CI (section 4.1.3) and Harriet, HN (section 5.1.2) identified that even when they could access data sometimes it was not specific to their

needs. These included compensation and benefits information, as well as job competences that are linked to human capital initiatives (e.g. L&D programmes) and target people's performance. The type of data required in international development is even more challenging and is dependent on the kinds of social change intervention. For example, a teacher-training workshop or cultural exchange programme would require different types of data for L1 to L4. These human capital data require a different process or framework for collection. Normally, too, the data also needs to be collected at the individual level for later aggregation because each participant's performance needs to be tracked and then the group's aggregated total used in the ROI calculation.

Initiatives using a ROI metric may also face being compared by the metric alone, which could affect the life of that initiative (as pointed out by Harriet, HN section 5.1.2). In addition, utilising isolation techniques to determine credible results was a challenge faced by practitioners in this study. One of the rules in this approach is that isolation should always be carried out for impact outcome data (L4), even if no ROI is to be calculated. However, most participants conceded that these isolation techniques were not being applied as robustly as they should be.

Within HN and IB, in particular, stakeholders can change quite frequently leading to a continued need for engaging people. Convincing pertinent stakeholders of the relevance of the approach to their job takes time. Their level of commitment to and autonomy in the job, self-efficacy, motivation and ability (Tamkin et al., 2002) could affect the implementation of the approach and delay it.

The different types of service systems between the corporate and health service on the one hand (organisations), and international development on the other hand (community) explains why IB faced (and still does) unique challenges to implementing ROI. First, IB was implementing the approach outside the normal applications and context. That is, the approach was developed to measure the impact of investments on employees in an organisation, while IB was using it to measure the impact of investments in beneficiaries within communities (service participants external to the organisation).

Second, different types of data needs to be collected (see Ingrid, IB section 6.1.2), For example, L3 outcomes normally deal with on the job performance but these competency-type indicators were not relevant in this context. Their service participants were not performing a job for IB; instead their action outcomes were targeted at persons outside of IB who reside in communities they serve (e.g.

employability skills for young people or women, or teaching skills for teachers in developing countries). Third, their initiatives do not normally provide results until after the 12-month evaluation guideline. Fourth, the service system performance results being targeted were not IB's results but the performance results of the community (and sometimes country).

Finally, a wide variety and number of evaluation approaches are used in the international development context. (For examples, see Coryn et al. (2007) and Stufflebeam (2001).) These approaches do not all abide by the ROI approach's principle of reporting benefits as conservatively as possible and therefore this can affect how projects evaluated using the ROI approach are reviewed. Ingrid's unit (section 6.1.2) provides more information on this particular challenge. Conservatism is one of the underlying principles in the ROI approach.

Being able to demonstrate the difference their initiative (e.g. training course) made was a common theme in all three sectors/contexts. However, the focus in each sector/context was different. Whereas, the corporate context was focused more on financial outcomes and efficiency (specifically, Company CG section 4.1.1), the health service was focused on learning outcomes and quality (e.g. Hannah, HN section 5.1.1). In the international development context, the emphasis was on impact, legacy and sustainability and therefore, the ROI approach was used as an impact evaluation method (Isaiah, Ingrid and Ian, IB – section 6.1). A bespoke logic model was created to capture IB's situation through changes to the V Diagram (see Figure 15: IB V diagram) and a much-tailored workbook. Although there is a workbook for the health service context it is not as tailored as the one used in IB.

2. Data on the actual cost and the realised monetary benefits must be credibly captured.

One crucial reason the metric was contingently appropriate is that suitable systems/procedures to capture people performance data did not exist in the organisations in this study. In some sectors/contexts, systems are being established through advances in technology to capture the required data for these types of ROI evaluations (e.g. use of LMS to link HR competences and L&D learning outcomes at the individual level). However, in others such as in sectors/contexts where the human capital being invested in resides external to the organisation, the challenges are even greater. For example, monetising benefits of social change activities and linking these to the service system performance.

ROI as a *method* was seen as appropriate to these participants for three main reasons. First, it allowed them to partially evaluate their human capital initiatives. In particular, the method provided a systematic process for planning and evaluating investments in human capital. Even though some participants found the concepts difficult to learn and apply in practice they all found it useful for these types of evaluations. Second, the method was perceived as a change tool because it facilitated culture and behaviour changes. That is, applying the method required necessary changes in organisational procedures and processes as well as in employee behaviours (L3). Third, participants' internal commitment to applying the method increased the need to consider it appropriate for these types of evaluations, especially as they spent more time, effort and resources on applying it. Therefore, even with the challenges faced across contexts/sectors and within (e.g. data collection, conservatism, time required for embedding/institutionalising), the method is appropriate for evaluating human capital investments. In light of this, debates would likely increasingly focus on the costs and benefits of doing these types evaluations – when is it worth doing and what is the ROI of doing an ROI evaluation?

The units revealed that improvements were already being made in all three contexts regarding data collection. They have all embarked on improving their technologies in some way, aiming to make it quick and easy for participants/stakeholders:

1. CG – new role to focus on technological development, particularly developing learning on mobile platforms

2. CI – to use their LMS to collect L3 data (360° feedback)
3. HN – worked with stakeholders to use online electronic data collection tool
4. IB – to embed data collection tools (for L3) within the intervention; create digital tool for data collection (e.g. Ingrid's online monitoring and evaluation platform)

Only one of the organisations (Company CG) had all of steps/phases of Argyris and Kaplan's processes fully in action. While all of the organisations set out to have relevant stakeholders educated in the ROI approach (internal and external), not all had senior management support (sponsorship) and organisational enablers (empowerment – aligned incentives). All of the organisations had individuals who were internally committed to getting the approach implemented but only Company CG had this at the senior management level. This significantly affected how the approach was embedded in the organisations. Instead, Company CI, HN and IB were using techniques, such as negotiation, networking and intrinsic motivation (respectively) to engage stakeholders.

A major challenge practitioners faced was the time it takes for the approach to become institutionalised. It takes long because it takes time to train all relevant staff, make and accept the changes and change behaviour (Melnyk et al., 2013), embed new processes and therefore change organisational culture. Other difficulties include, as discussed earlier, data collection. Whether it was getting the right kind of data, good quality data or just access to the data, all participants reported challenges in this area. Even where data was sourced and had been standardised, benefits were hard to convert to monetary values. Notwithstanding the guideline that only a small number of all human capital initiatives for the organisation need to have ROI calculated, only Cory, Company CG could give an example of a project that actually calculated ROI (Harriet was considering it for her project).

Finally, this study also indicates that the ROI metric may be applicable to other domains, as long as the data on cost and monetary benefits can be collected and isolated. However, the ROI approach investigated in this study is only suitable to domains where the measurement of people performance is taking place. That is, when measurements of how investments to change their competences affect

the service system's performance are required. Fundamentally, this particular approach measures the impact of a knowledge transfer initiative, e.g. an L&D event, change/process improvement programme, or social change project.

In summary, the ROI approach is difficult to apply in practice because the concepts, principles and techniques are challenging to learn. For many practitioners these are new and need to be integrated and embedded into daily thinking and practice, which can take considerable time and effort. This is similar to the findings of Millar and Hall's (2013, p. 936) that practitioners that "had used SROI found it a challenging, complex and time consuming process with minimal resulting benefits". Large, complex projects involving multiple agencies/stakeholders (e.g. at HN and IB) normally take long to implement, which would impact the length of time it takes to embed the ROI approach especially since they are also being used as examples/case studies of its use. In addition, there are significant challenges in trying to engage stakeholders (internal and external) to make the required changes to their own ways of working. This requires practitioners to become adept at political manoeuvring in some cases. Furthermore, collecting and analysing data for investments in human capital is not taught in traditional management education.

Notwithstanding these difficulties, a key finding of this study was that applying the method was of value to practitioners even when they could not employ the metric to calculate the ROI. The principles, processes and tools provided the practitioners with a map of what they could aspire to do in planning, monitoring and evaluating their human capital initiatives. This suggests the method was more important than the metric to these practitioners because they were learning to plan, monitor and evaluate their human capital initiatives in a systematic way. There was a process that they could follow. Despite the challenges in fully applying the method it was still appreciated because the practitioners could turn their focus on aspects of the method that they could actually apply, while keeping full application as a goal they aspire to attain. The method also provides a blueprint for organisational change. Specifically, the method is a blueprint for how to evaluate human capital investments that organisations can use to make changes to their policies, procedures and MIS. It can be implemented incrementally even over a long period of time, regardless of the sector/context.

8 Conclusions: The Appropriateness of Financial Metrics for Human Capital Investments

This study has examined the appropriateness of using financial metrics for evaluating human capital investments. It has been pursued through a case study of the ROI metric. This final chapter considers the wider implications of the findings from the case. It starts by reprising the background and rationale for the research, the logic of its design, and the concepts that have framed it. Then the findings from the case study are reiterated, along the lines of the research questions. This is followed by a consideration of the implications of the ROI case for the appropriateness of other financial metrics being applied to evaluate human capital investments. The chapter ends by reflecting on the limitations of the study and the priorities for further work.

8.1 Reprise: The Research Context, Questions and Design

As noted in chapter 1, evaluation as a professional practice is now well established encompassing many tools and methods for conducting evaluations. Yet, very few of these tools address the appraisal of human capital investments, particularly in terms of assessing returns for spending on human capital initiatives. Financial metrics, and particularly the ROI metric, are increasingly being used to evaluate projects in new domains, including spreading into the domain of human capital investments. However, to date, the academic literature on evaluation has paid very little attention to the diffusion of this concept, even with it being actively promoted by government bodies in some contexts. In addition, the appropriateness of the use of financial metrics and what is involved in implementing them have not been previously examined. Hence, the aim of the study was to explore how one of these financial metrics (ROI) was being applied to human capital investments. In the UK, three key methods for evaluating human capital investments are the Phillips' ROI Methodology™, the SROI approach and the abdi ROI recommended approach. Each of these approaches uses the ROI metric.

To conduct the study some conceptual clarifications were first required. More specifically, clarity about the way the term ROI might be used (as a metaphor, as a metric and as a method/approach) as well as about who appropriates and benefits or gets the return from the human capital investment.

In this sense, how ROI was being used would seem to depend on the context of use. In addition, what it might mean to implement the ROI metric within an ROI approach also had to be articulated in theoretically adequate ways.

Relevant and widely cited literature pertaining to learning and applying a new approach in practice was reviewed. This included a description of two models for learning acquisition: 1) Bloom's (1956) Taxonomy and 2) Dreyfus' (2004) Five-Stage Skills Acquisition Model. In addition, seminal works about knowledge, practice and context, as well as the interdependence of the knowledge-practice-context relationship, the explicit-tacit double act, the SECI Model, theories of actions, communities of practice, *ba* and an overview of organisational defensive routines practitioners engage in when feeling threatened were discussed (Argyris and Schön, 1974; Nonaka et al., 2001; Wenger, 2000). Argyris and Kaplan's (1994) implementation processes for introducing a new technical approach were used to help discuss the findings of the study. These seminal pieces helped frame the conceptual framework for this study, which was used to structure the analysis of the data.

The research questions were:

How appropriate are financial metrics for evaluating human capital investments? More specifically, for evaluation approaches that include the ROI metric:

1. How is the metric and approach perceived or interpreted?
2. What is involved in learning and applying the approach and, by extension, the metric?
3. In what ways do different contexts render use of the approach (and metric) more or less challenging?

Since the study would rely heavily on participants' accounts of how they applied an ROI approach, constructivism/interpretivism was employed as the research paradigm. Case study research was selected as the research strategy, by way of an exploratory embedded case study (i.e. a single case with sub-units) to investigate the phenomenon of the diffusion of ROI to human capital investments. The abdi recommended ROI approach was chosen as the case study example of an ROI approach. Consequently, the attempt to learn, introduce and apply this ROI approach in practice in particular sectors/contexts provides the unit of analysis for the subsidiary, embedded cases. Ten units of

attempts to implement this ROI approach were developed and analysed in three different contexts/sectors. This was executed through a qualitative study, where the methods used for data collection were observations, interviews and document analyses. A selection of appropriate analytical tools was used to rigorously interrogate the data and to maintain research quality. These included thematic analysis, constant comparative analysis, template analysis, data displays, and cross-case synthesis.

8.2 Findings from the ROI Case Study

8.2.1 Perceptions and Interpretations of ROI

The first research sub-question was: *How is the metric and approach perceived or interpreted?* In keeping with other studies (Botchkarev and Andru, 2011; Millar and Hall, 2013), ROI was found to have multiple interpretations and uses. More specifically, from this study ROI has a tri-fold interpretation: as a metaphor (conveying a value for money ethos or aspiration), as a metric, and as a method (approach, structured process, or framework).

The practitioners in this study, who had been trained in the ROI approach, used the term predominantly to refer to the method, which covered planning and implementing their human capital initiatives not just evaluating them. Even though the ROI approach is a step-by-step process that culminates in calculating a monetary value (the ROI metric) this final stage was not seen as a priority by the participants in this study. Instead, the priority was being able to learn and apply a structured method for planning, implementing and evaluating these types of initiatives. There was only one example of the ROI metric itself being used to evaluate human capital investments; i.e., in only one out of the ten units was the approach fully applied. This focus on the method was in keeping with recommendations by its proponents who advised that measurement using the metric should only be carried out occasionally, when really required.

The fact that use of the method only rarely culminated in an ROI figure (metric) does not seem to have reduced its value in the eyes of participants. The ROI approach was described as a change tool and the participants appreciated it on that basis. This is because applying the approach in

practice requires a number of changes to occur. These changes affect the participants and the service system, and in some cases external stakeholders. Embedding the approach requires a change in the organisation's culture, particularly regarding measuring people performance when evaluating human capital initiatives. Across all three sectors/contexts applying the approach was tantamount to implementing an organisation-wide change initiative. It also required a financially focused culture change, i.e. a change of values and tacit assumptions about evaluating human capital in a monetary, quantifiable way.

Why would an ROI approach be presented in terms of ROI when ROI calculations are not actually encouraged? It would appear that the term ROI in the title is a good marketing tool because it grabs the attention of the target audience, i.e. those who need to be convinced or want to convince others about the value for money or returns from their human capital investments. This point is considered further below (section 8.2.4).

8.2.2 Learning and Applying ROI

The second research sub-questions was: *What is involved in learning and applying the approach and, by extension, the metric?* Addressing this question meant explicating what is involved in learning and applying a structured process that uses the ROI metric to evaluate human capital investments. Such an evaluation has to elucidate what happens between the investment and the resulting changes in the service system's performance. To this end, it is important to be able to capture data regarding the performance of the people in whom the investment is made. Indeed, data on the resulting changes in the cognitive, affective and psychomotor domains, and how these impact the individual and group performance, is crucial for applying this financial metric to human capital investments.

There was a general consensus across all sectors/contexts that the ROI approach was difficult to learn and implement in practice, and full implementation took years to accomplish. Two underlying reasons for this emerged from the units.

First, adopting the method was conceptually and operationally challenging for participants. It was never a case of gathering relevant competency data and financial estimates from an existing

information system, in order to simply add a further analytic level to existing evaluation practices. Rather, before being trained, most participants used or were familiar with only quite limited evaluation practices. In fact, many needed a better grasp of project planning tools to prepare their human capital investments in a way that could be evaluated. Hence, the participants were learning the principles of a wider approach to planning and evaluating their human capital investment initiatives. In addition, they were learning how to calculate the ROI metric, *if and when* the relevant information could be identified and accessed. In practice, these data requirements were consistently a challenge often requiring organisational skills to negotiate provision and access. For these reasons, participants found that absorbing the ROI ideas and bringing them into their (and their team's) practice was to engage, both as recipient and provider, in a sustained exercise in knowledge transfer.

The second underlying reason for the reported difficulties in learning and applying the approach, and the time it required, arises from a common misconception about the scope of the approach. This was as a result of how it was introduced to the participant but it also affected how it was introduced to the organisation. In each unit, the first encounter with the ROI approach, in line with the thrust of its promotion, was as an L&D evaluation tool, as if it could be deployed individually or at a departmental level by a small team of colleagues. In fact, applying the approach in practice quickly required the involvement of a wider group of stakeholders (e.g. operations/line managers and finance personnel) from the rest of the organisation, or even beyond, and required political manoeuvring on the practitioner's part. Typically, L&D and M&E practitioners do not have access to some types of data and would need the co-operation of other colleagues. Later, when applying the method to process improvement and social change initiatives the circle of those whose co-operation is needed extends further, and the likelihood that the information system will need extension or redevelopment increases. Hence, as expected, it was found that attempts to implement the approach went further and faster when processes associated with successful implementation of a technical approach (education of relevant stakeholders, senior management sponsorship, alignment of incentives, etc.) were more closely approximated. As a matter of fact, as noted, only one company showed evidence of these processes being present – and it was the only organisation to have calculated ROI on more than one investment (i.e. full implementation of the approach). The other organisations showed evidence of some of the stages/steps in these processes but struggled to implement the approach to the same extent.

These two underlying difficulties answer the question '*what is involved in learning and applying the approach and, by extension, metric?*' However, presented as such, they provide an unduly negative picture. In fact, as they learnt the approach, participants were recognising the need to better evaluate their investment initiatives, and to standardise how they planned and evaluated them (more so in the corporate and health service contexts). The participants reported being able to connect these investment initiatives to the service system's performance results, using a common language among colleagues, and becoming more confident to apply the approach and to deal with the challenges encountered. The study revealed that this resulted in changed behaviour, where participants applied all or parts of the approach. As stated before, partial implementation was much more common and this was seen as a useful advance, not as failure. These reported benefits seem to explain why in many of the cases such partial implementation was sustained for long periods of time.

8.2.3 How the ROI Challenges Varied in Different Contexts

The final research sub-question was: *In what ways do different contexts render use of the approach (and metric) more or less challenging?* The participants from this study were from three different sectors/context: corporate (private), health service (public) and international development (non-profit). Therefore, they were evaluating human capital initiatives in two different *types* of service systems.

The corporate and health service participants were evaluating initiatives intended to provide benefits (of different types) to the organisations making the investments. The international development participants were evaluating investments that would return benefits to various communities/countries across the globe. All these settings presented challenges, but these seemed most intense for the international development sector/context. These practitioners faced a unique combination of challenges, including difficulties identifying suitable outcomes to target, acquiring suitable reliable data, the extended time it takes for benefits to be observed, and monetising the kinds of benefits their initiatives returned. By contrast, the corporate context was much more favourable; the use of financial metrics to measure outcomes was already part of the wider organisational culture, and the existing information system was more easily mined for relevant information.

Even so, it is also the case that, in some ways, the international development context also provided a supportive environment for ROI, notwithstanding it being mainly used as a metaphor rather than a metric. This was because ROI could be presented as a (superior) form of impact evaluation, an idea widely espoused within that field, although challenging to implement.

8.2.4 The Appropriateness of 'ROI' for evaluating Human Capital investments

As noted in chapter 1, calls for the diffusion of the ROI metric from its original applications (evaluating investments in physical capital, e.g. machinery) into very different domains raise questions about the applicability and appropriateness of the metric for these 'softer' domains. Investments in human capital are one such domain, and potentially a receptive one, given the avid interest in financial metrics among practitioners, particularly from HR and Evaluation.

This study has shown that answers to the question of appropriateness are highly contingent. One important set of contingencies concerns the readiness of the organization to generate, gather and analyse the types of information required by the metric. Essentially, two conditions for calculating the ROI of human capital investments using the metric are:

- 1) the link between the investment and the resulting performance of the service system (whether of the organisation or community) must be demonstrated through the people who participated in the investment initiative (via people performance), isolating other influencing factors;
- 2) data on the actual cost and the realised monetary benefits must be credibly captured.

These conditions posed serious challenges for all the organisations in this study, but some much more than others. As was shown, applying the ROI metric in an evaluation approach to measure human capital investments is very difficult and takes time.

However, with its three-fold usage, i.e. not just as a metric but also as a metaphor and a method, ROI can still be usefully deployed in evaluating human capital investments. That is, some participants in the study valued the benefits they gained from it enough to sustain their use of it long after first

learning about it. Crucially, these benefits depended heavily on which usage or usages of 'ROI' they were adopting. More specifically, appropriateness was contingent on the ways in which participants aligned use of some or all of the ROI approach with their own needs and purposes, given the readiness for more financially focussed thinking in the organisation where they worked.

Therefore, although actual applications of the metric were rare, ROI was still widely used as a metaphor or concept, to express a general commitment towards ensuring value for money for investments in human capital initiatives. In addition, participants considered the ROI method appropriate because it provided a systematic process for planning and evaluating human capital investments. The concepts learnt could be adapted to suit different contexts where human capital investments were made. The approach was also valued because its use facilitated culture and behavioural change. This is notwithstanding the immense challenges faced, e.g. data collection, conservatism, and time required for embedding/institutionalising.

These various issues, the challenges and the opportunities provided by the method, discussed through this chapter, are summarised in Figure 16. Against this background, the method can be seen as providing participants with an *aspirational map*. As such, it provided an overview of where they were and where they were aiming for; one that offered some practical guidance that could be immediately used as well as guidance orientated towards a long-term aspiration. Even those who had only actually applied the early steps in the approach appreciated the perspective and rationale that the method provided. This suggests the method provided the most important usage of ROI, over the metric and even the metaphor, for these practitioners. Also, in addition to being an aspirational map for practitioners it provides the organisation with a blueprint for evaluating human capital investments. The systematic processes, principles and tools offer guidance on the changes to be made to policies, procedures and MIS to facilitate evaluating human capital investments. It appears these changes can be implemented incrementally over a long period of time in any sector/context.

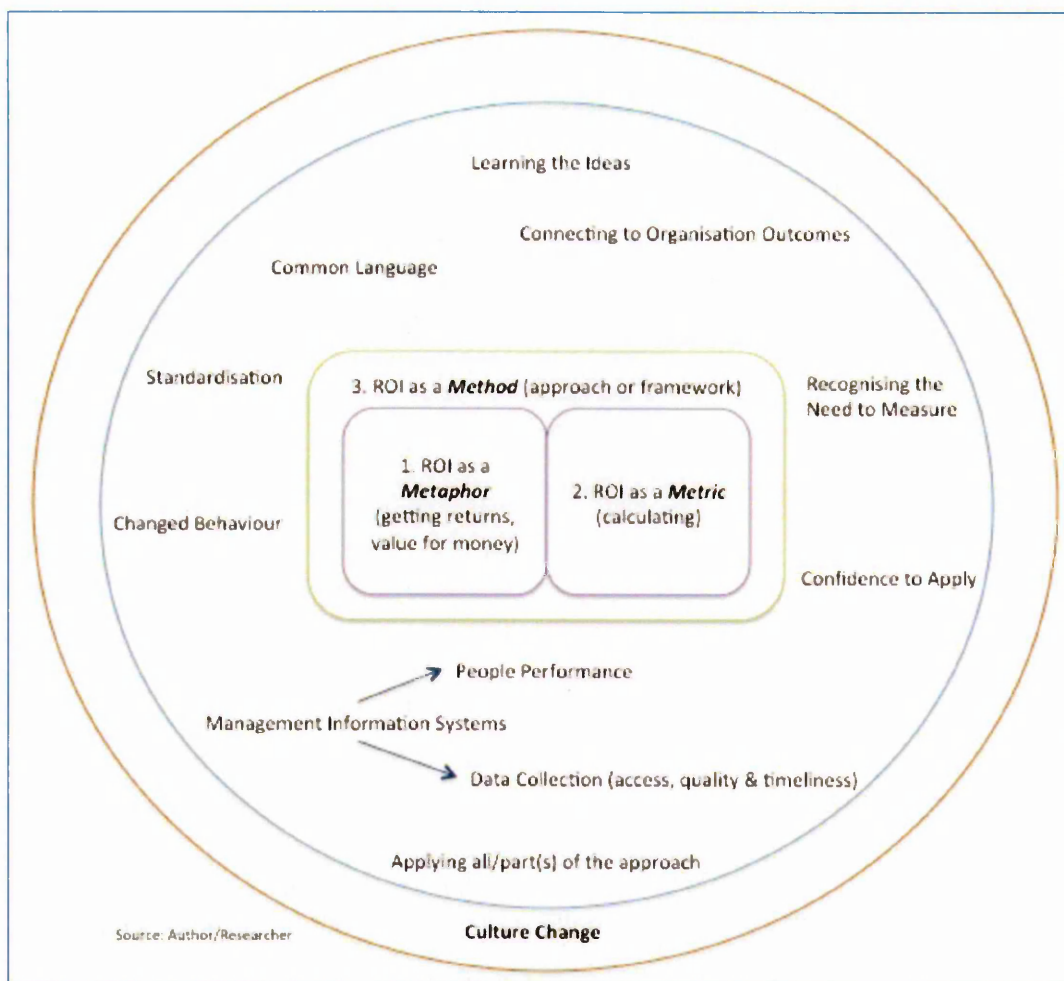


Figure 16: Embedding ROI in Practice

8.3 Relevance of the ROI Case for the Appropriateness of Other Financial Metrics to Human Capital Investments

The main research question was: *How appropriate are financial metrics for evaluating human capital investments?* There has been considerable research conducted on human capital analytics, as “an evidence-based approach for making better decisions on the people side of the business” with a range of tools and technologies (Bassi, 2011, p. 16). Calls for greater use of ROI for human capital investments (Mondore et al., 2011) is part of this trend, along with other suggestions, such as the Human Economic Value Added (HEVA) financial metric (Fitz-Enz, 2009b).

Based on what were found to be the key contingencies affecting appropriateness in the ROI case, some cautious extrapolations to other financial metrics are offered in this section.

8.3.1 The Appropriateness of Financial Metrics

The implications of the ROI case are that the appropriateness of other financial metrics is also likely to be highly contingent both on the existing data infrastructure and organisational culture, as well as on the benefits being sought through the introduction of the metric.

More specifically, if the metric was intended for use at the level of specific initiatives and investments, then the two essential requirements will remain: 1) for data linking the investment and changes in the service system performance; and 2) data on the actual costs and realised benefits. Using the HEVA financial metric as an example, this means capturing people performance data that links to the persons participating in the initiative.

A great deal follows from these two requirements. Undertaking the embedding of an evaluation approach that is the vehicle for a financial metric is very *unlikely* to provide those involved with a 'quick win'. A systematic process for applying the metric would need to be clearly articulated and people trained to apply it. For example, clearly outlined steps for measuring changes in performance and applying the HEVA financial metric would be necessary to ensure data quality and consistency. Practitioners would need to plan for the considerable time, resources and effort it takes to learn and apply the approach. Likewise, an organisation implementing the metric would need to have in place, or to introduce, the systems to make good use of the data. Such implementation might require stakeholder analysis to decide who should be involved, technology assessment to determine the essential adjustments or additions to existing IT software or hardware, as well as training needs analysis to decide key personnel to learn the method. An implementation plan would need to include how data will be accessed and by whom, as well as considering the analytic effort required to design, capture and use the data. Senior management time would be required in support of explicit implementation processes for this new technical approach (funding the education, sponsorship, aligning incentives – as per Argyris and Kaplan (1994)).

Whether this effort would be appropriate would largely depend on how much benefit use of the financial metric was likely to give rise to, particularly, regarding improved human capital investment decision-making. That is, would implementing, for example the HEVA financial metric provide

sufficient benefits to warrant the time, effort and resources required? It might – if the process for applying the metric were kept simple and if the context for application was favourable. That is, the existing systems were already in place or required only minor adjustments; or the need for legitimacy provided by the metric was particularly strong.

The extent of benefits from a financial metric is also likely to depend on the scope of its introduction. The method may serve the need of a particular department or it may have other applications, e.g. it may be part of a broader project to develop a more 'financialised' performance management system (PMS) for an organisation. In principle, use of the metric can be extended to underpin an organisation-wide approach to the measurement and management of people performance. Arguably, the more it is used the wider will spread suggestions for its further use. In that case, the whole organisation (L&D, HR, Finance, Operations, Evaluation, etc.) would become connected to a new PMS, a new organisational structure and control system (Hofstede et al., 1990). This might draw in additional senior level support but it could not also remain simple, since it would be trying to meet additional objectives. It would then be at the opposite extreme of employing a rudimentary financial metric within one department, e.g. L&D or M&E.

8.3.2 The Appropriateness of Financially Oriented *Methods* for Evaluating Investments in Human Capital

As just noted, the introduction of a financial metric not previously used for human capital, will almost certainly require development of a method or approach to provide a vehicle for the new metric, and ensure its consistent use. The clearest and most striking finding of the ROI case study was that this method was widely appreciated by participants even though use of the method rarely culminated in the use of the ROI metric. Even limited progress with the stages of the method was still valued by the practitioners involved. For two reasons, it seems quite possible that what was found in the ROI case would be found with another financially oriented approach.

First, it seems that ROI functioned as a *bridging metric*, and on the face of it, other financial metrics may also work in this or a similar way. In this sense, a bridging metric is one that can be very widely espoused, expressing a shared commitment or purpose among stakeholders who have very different

professional or functional backgrounds and outlooks. Its function is to provide a degree of integration in deeply differentiated organisations (Lawrence and Lorsch, 1967). Use of the method, even if references to the metric are metaphorical, *shows willing*. It helps frame the discussion. And it provides the additional authority that derives from evident legitimacy. Arguably, these concerns underpin the search for financial metrics applicable to human capital investments. Moreover, this benefit, i.e. providing scope to strengthen relationships vertically and horizontally, seemed to flow from embracing the ROI approach even if it was only ever partially implemented.

Secondly, the practitioners involved may have come to recognise limitations in their current evaluation practice and may be seeking a more sophisticated way of ensuring and demonstrating the value of their work and the human capital initiatives undertaken. Consequently, they may come to appreciate a different financially oriented method for reasons similar to those that the practitioners in this study expressed for the ROI approach. Specifically, in the ROI case, it seemed the participants treated the approach as an *aspirational map*, i.e. a depiction of what needs to be done regarding planning, implementing and evaluating human capital investments. They appeared to view the full implementation of the approach as a goal they espoused, while some of the earlier stage tools and techniques were practices they tried out and perhaps incorporated into their theories-in-use. In this sense, the method was treated as guidelines or established procedures for how to carry out particular aspects of a role, i.e. planning and evaluating initiatives. However, this proved to be very difficult because the approach had not been institutionalised, especially since the participants do not operate in isolation (Barnes and Hinton, 2012; Paton, 2003). That is, the ROI approach studied was not embedded throughout the organisations (except for one, CGLSD) and did not have widespread approval and co-operation of relevant stakeholders.

The conceptual contribution made by the study, therefore, is that understanding the use of financial metrics for human capital can be extended if they are viewed as *bridging metrics* that provide practitioners facing complex evaluation challenges with *aspirational maps*. If other financial metrics also sustain similar tri-fold interpretation and use, dialogue between different stakeholders of different disciplines as well as management levels can be facilitated; and individual practitioners can better see 'the wood for the trees' in their challenging roles.

8.4 Limitations of the Study and Priorities for Further Research

As with studies of this kind, there were a number of limitations. Discussions on some topics within this thesis could not go into as much depth as desired because of the scope of the study. Specifically, human capital measurement in chapter 1 could have benefitted from a deeper review on the current claims of the various types of human capital measurement. This would include where there were agreements as well as disagreements. Similarly, this chapter could have included a comparison of how applications of the ROI metric were faring in other domains as well as the different variations of the formulas used in these applications.

In addition, there was heavy reliance on key informants because of the nature of the study. That is, practitioners were asked to devote considerable time for interviews, follow up emails and reviewing the completed units. Therefore, the number of participants who were willing and available during the allocated time was limited. In any case, the aim was to achieve authenticity rather than statistical representation. There was also the possible issue of how much participants were self-justifying to reduce cognitive dissonance after spending considerable time, resources and effort on learning and applying the approach as well as participating in this study. For data analysis, decisions had to be taken on how much to include in the thesis. In this regard, an interim report was prepared for the collaborating company that focused on the workshops observed and provided feedback on how participants were coping with learning and applying the approach. The focus of the thesis is the unit of analysis (the attempts to learn, introduce and apply the approach in practice in a particular context).

The study could have benefited by including more longitudinal cases (from start to finish, i.e. from Foundation workshop to impact report for a live project) as was originally planned. However, this could not be achieved because of timing and availability of practitioners with these types of initiatives within the duration of the three-year study. As a result, there are a small number of interviews for each unit, as well as a small number of units for each context and only one of the ROI approaches was explored. This means that the results of the study are not statistically representative of the general population of organisations applying the ROI metric via evaluation approaches. However, with qualitative studies this is not the aim. Instead, the aim was to achieve an authentic representation of how practitioners attempted to apply a financial metric (in this case, ROI) in an evaluation approach

in practice within their respective sectors/contexts to evaluate their investments in human capital (Silverman, 2006). Even so, there can be analytic generalisations of the findings of the study (Silverman, 2006).

Relatedly, the key difference found between the sectors/contexts was the types of service systems being evaluated (organisation and/or community/country), which highlighted the investors and the recipients of the investment. Other differences found could not be solely attributed to the respective sectors/contexts but instead to the type of organisation making the investment, i.e. those implementing the initiative. This was an unexpected but interesting finding. One reason for this could be that the practitioners were from the same community of practice – evaluation, i.e. they had a shared passion and similar experiences of evaluating human capital initiatives. After all, they were all from L&D and Education disciplines even though they functioned in different sectors/contexts. This was a limitation that a larger scale study, with full applications of the method, could potentially illuminate further.

A final limitation in this study is the use of the word ‘appropriate’ in the main research question: *How appropriate are financial metrics for evaluating human capital investments?* Upon reflection, use of such a normative word was nebulous especially since the research aimed to investigate how a technical approach was being learnt and applied in practice within different settings. Future practice-based studies may want to consider a more descriptive word. For example, the research question could have been phrased *‘How practical are financial metrics for evaluating human capital investments?’* This question allows for a research design where the process for learning and applying the metric can be described and the practicality of the metric being used to evaluate human capital investments assessed.

Notwithstanding these limitations, this is a good starting point for other researchers interested in similar studies, e.g. exploring applications of other financial metrics to human capital investments or even to other domains of capital investments. An understandable first suggestion is the continuation of the current study. Specifically, a qualitative study exploring how far the participants of this study had gone with the implementation of the ROI approach could potentially return interesting findings. To complement this exploratory study, another suggestion is a quantitative study, where the population of people attending courses on ROI approaches (e.g. the three approaches identified) are

targeted. For example, a sample could be drawn from the aforementioned population to whom questionnaires are sent to assess: the attrition rate of courses, stages of implementation (how many actually calculate ROI), existing conditions in organisations before and at specific times of the study (to determine organisational changes), as well as the contexts of the organisations. This could possibly include tracking particular cohorts over one or more years.

The ROI case study showed that applying a financial metric involved implementing a specified process (the method), while conceptualising it as a metaphor. The three conceptual distinctions intertwined in practice. This suggests that when applying other financial metrics to evaluate human capital investments, individuals may interpret the particular financial metric not only as a metric but also as a metaphor (of the particular purpose of that metric) as well as a method (the process for applying the metric). That is, the financial metric could be interpreted as a bridging metric. Also, as discussed earlier, practitioners viewed the ROI approach as an aspirational map, i.e. it provided an overview of where they were and where they were aiming for. Further studies could explore these issues with other financial metrics. Research questions could include: are all financial metrics that are applied to human capital investments interpreted as a bridging metric? What types of methods could be ascribed as aspirational maps or what would be required for an (evaluation) approach to be considered an aspirational map? This latter question could potentially explore methods beyond human capital evaluation approaches.

In this study, the ROI metric was used as a case study to explore how financial metrics were applied to evaluate human capital investments. One of the findings was that measuring people performance is crucial for evaluating human capital investments, suggesting this would be the case for other financial metrics. Further research could test this theory by exploring how other financial metrics have been used to evaluate investments in human capital. A similar study to this one could be undertaken; where a financial metric that is being similarly used is identified and explored using case study research.

The area of human capital analytics has been centred on human capitals within organisations. Human capitals that are being invested in but who reside outside of the organisation pose additional challenges – and opportunities. Regardless of the sector/context, service users (e.g. customers, patients and beneficiaries) are co-producers in service (Zeithaml and Bitner, 2003). It has been

reported that more than 50% of organisations have some form of training for their business partners or customers, with advocates calling for more organisations to do this (Courdy and Wells, 2015; Perry, 2012). These types of investments can be seen as external human capital investments. When the capability for capturing people performance data is more fully established, financial and quasi-financial metrics could be used to evaluate these investments. Further studies could explore how this issue is being handled or should be handled. For example, how could/should the domains of people performance be measured, monitored and evaluated for a community-based initiative such as a culture awareness programme in a developing country or a customer training eLearning course?

Finally, generally accepted categories for capital investments are physical (manufactured and natural), financial, social, relational, intellectual and human. The ROI metric was developed to measure the rate of return on investments in physical capital. This study has shown how it is being used to measure investments in human capital and that under certain conditions it is suitable for this type of investment. However, further research could be undertaken to ascertain the other types of capital investments the metric is suitable for. This can follow a similar methodology as the one taken in this study, i.e. identification of where it is being used and an exploration of how the metric is actually used in the other domains, using a constructivist/interpretivist research paradigm.

Appendices

Appendix 1 – The OU/abdi Collaboration

Based in Cambridge UK, abdi Limited are a research and consultancy firm set up to “*promote excellence in Global organisations of every sector in measuring the impact of learning and development*” (2012). Initially, they trained L&D practitioners in the corporate sector to evaluate their training programmes using the Phillips ROI Methodology™. Drawing on this approach, as well as others, such as the logic model, theory of change and activity based costing; abdi Ltd has developed their own recommended ROI approach to measure impact outcomes using the financial metric, ROI.

They offer a range of professional qualifications in their ROI approach. These are aimed at improving practitioners’ skills in “planning, measuring, analysing and reporting performance and business impact results and value for money (ROI) for human capital investments” (abdi Ltd, 2011, online). Recently, demand for their competency-based workshops has increased from other practitioners (e.g. operations managers making process changes) in three of the contexts they serve, i.e. corporate, health service, and international development. With this avid interest in their approach, abdi was keen to have rigorous independent research conducted to help them understand how their approach crossed contexts. They were interested in finding out whether the approach changed significantly once it was applied in these contexts, as well as whether or not it was suitable for these contexts.

To this end, the Open University Business School (OUBS) made an agreement with abdi Ltd to part-sponsor a three-year full-time doctoral studentship under the working title *Performance Measurement: Applying ROI to New Domains*. The studentship was advertised and following the selection process the researcher began the study in October 2011. The researcher was attracted to this study because of previous experience and qualifications in performance measurement in service, as well as interest in applications of the ROI metric. This, along with the opportunity to gain access to data and practice through abdi Ltd, as well as the resources of the OUBS research team, provided a great opportunity to explore how the ROI metric was being used within an evaluation approach to measure the investments made in human capital – an alternate domain from where it was developed. Prior to embarking on the study the researcher completed the Foundation award to become familiar with and gain a deeper understanding of the ROI approach.

Appendix 2 – Assessment Templates

Project Justification

	No more than 200 words in each box
The Content and nature of the project	
A brief description of the project, programme or activity (its objectives, size, scope, timescale and nature)	
Its importance in strategic or operational terms	
Its cost (including any pre-costs like research or purchase of equipment, and indirect costs like the value of participants' time whilst engaged)	
The relative size and importance of the investment to the organisation	
The level and nature of key stakeholder interest and involvement in its evaluation	
Your assessment of the availability of good quality data for impact and performance outcomes	
The reason for devoting the time and money to complete an evaluation	
Who will be the key stakeholders? (Managers, participants, beneficiaries, key colleagues, customers, clients etc)	

Needs and Objectives

LEVEL	NEEDS (Opportunities, threats, problems)	OBJECTIVES (Specific, Targeted, Quantified, time-linked targets and SMART data measures)	MEASUREMENT (How will this information be obtained and recorded?)
5	The payoff required from the project / programme / course / activity / event / incentive you are evaluating	ROI Objective (value for money on the project / programme / course / activity / event / initiative you are evaluating) – if you have financial data	
4	Business / organisation needs, opportunities or threats (for all programmes and initiatives)	Impact objectives (add further rows if you have more than 3 objectives)	
3	Job performance/implementation needs	Application/implementation objectives (add further rows if you have more than 3 objectives)	
2	Learning needs	Learning / capacity-building objectives (add further rows if you have more than 3 objectives)	
1	Engagement issues (in the context of the preferred solution: what would enable or prevent key stakeholders achieving the objectives and levels 2 and 3?)	Engagement, Satisfaction, Reaction and Action objectives for key stakeholders (add further rows if you have more than 3 objectives)	

Data Collection

	OBJECTIVES (Precisely as written in the Needs and Objectives)	DATA COLLECTION METHOD	DATA SOURCES	TIMING	RESPONSIBILITY (Who will ensure that the data becomes part of the evaluation?)
5. ROI					
4. Business Organisational Impact					
3. Application of learning or capacity					
2. Learning, Confidence, Capacity building					
1. Engagement, reaction, planned action					

Data Analysis Part 1

OUTCOME DATA ANALYSIS PLAN (LEVELS 1, 2 & 3)									
LEVEL 3	Tasks/Activities		Behaviour		Performance				
	Benchmarks/Targets	Objectives	Benchmarks/Targets	Objectives					
LEVEL 2	Knowledge		Skills		Attitude				
	Benchmarks/Targets	Objectives	Benchmarks/Targets	Objectives	Benchmarks/Targets	Objectives			
LEVEL 1	Relevance to job		Importance to organisation / department		% new knowledge		Recommend to others		Intention to apply
	Benchmarks/Targets	Objectives	Benchmarks/Targets	Objectives	Benchmarks/Targets	Objectives			

Data Analysis Part 2

Data Analysis Part 2	Planned impact objective outcomes		
	A-	B-	C-
Objective			
Planned change			
What else will influence a change in these outcomes			
Source of data			
Can you put a money value on this outcome			
Analysis responsibility			
Impact outcomes report preparation responsibility			

Cost Sheet

Cost items	Item	Source of data	Guidance
1			Specify each cost item and where the cost information will be sourced
2			
3			
4			
5			
6			
7			
8			
9			
10			
When will forecast be complete			This cost forecast should be signed off before the program/project starts
Dates for monitoring			Regular dates to monitor costs against forecast
Date 1			
Date 2			
Date 3			
Final cost collection date:			Date when the final costs report will be completed

Schedule

Year												
Month number	1	2	3	4	5	6	7	8	9	10	11	12
Actual Month												
Programme initiative schedule												
Plan												
Design/Develop												
Deliver												
Conclude												
Evaluation Planning												
Activity description												
Activity description												
Activity description												
Data Collection												
Activity description												
Activity description												
Activity description												
Activity description												
Data Analysis												
Activity description												
Activity description												
Activity description												
Activity description												
Attribution / Isolation												
Activity description												
Activity description												
Activity description												
Converting benefits to monetary value												
Activity description												
Activity description												
Activity description												
Activity description												
Cost tabulation												
Calculating ROI												
Identify and describe Intangibles												
Communications including reporting												
Impact Case Study drafting (Delivey / present report)												
Deliver / Present impact study												

Appendix 3 – Case Study Template

SECTION A: Background

1. Need for initiative/intervention and evaluation
2. Evaluation methodologies available (currently/previously used) and reason for selecting abdi's ROI recommended approach
3. Objectives, planned schedule

SECTION B: Data Collection and Analysis (Explicit Procedures)

1. Data collection plan
 - Types of data to be collected (including costs and intangibles)
 - The levels at which they are to be collected (from baseline)
 - How (instruments – surveys, interviews, assessments, etc.)
 - Sources – from whom/where will it be collected

SECTION C: Analysis

1. Techniques used to for isolation – control groups, time line analysis, estimates, forecasting, etc.
2. Linkages to organisation's results (impact)
3. Cost categories to be used – intervention/initiative costs, materials, etc.
4. Data to be converted to monetary value – employee time, profit/savings from intervention/initiative, etc.
5. Techniques used to convert to monetary values
6. Intangibles

SECTION D: Results

1. Procedures (Explicit)
2. Results at all levels – engagement, learning, application, business impact and ROI, as well as intangible benefits (what levels have they focussed on?)
3. Identify success and failures, barriers and enablers to implementation
4. Reporting strategy – identify stakeholders who received the report
5. Impact on the organization – any changes
6. Will the intervention/initiative continue or not, expanded or adjusted?
7. Were there any changes/adjustments made to abdi's process?
8. Features of abdi's approach that are particularly relevant (or not) for each organisation's issues

SECTION E: Practitioner Skills (Tacit)

1. Stakeholder responses throughout implementation
2. Individual background (training and experience) – learning and development, operations, finance
3. Reaction throughout implementation – including challenges, how differences/disagreements are resolved
4. The roles played by 'hard' and 'soft' functional areas
5. Personal learning throughout implementation – what would be done differently/remain
6. Political setting within the organisation

Appendix 4 – Data Collection Process

1. Researcher to attend abdi's workshop for direct observation.
 - Facilitator to provide introductions of researcher to workshop attendees (a short script will be provided)
 - Attendees to provide consent (via abdi's sign-up sheet) for researcher to observe workshop
 - Researcher to observe all days of the workshop, taking notes as required, from an unobtrusive location within the room
 - During breaks, etc. the researcher can mingle with attendees, networking and getting to know the attendees
 - Following the workshop, the researcher will transcribe notes/observations taken
2. Two/Three days after the workshop the list of workshop attendees will be examined (judgement sampling) and the following groups excluded:
 - Attendees who have indicated that they will not complete the assessment
 - Attendees in job roles that would not carry out up to level 5 implementation
3. A short list of possible participants will be prepared from that workshop
4. Around 35 days after the workshop (after assessments have been handed in and feedbacks sent out), the shortlist of participants will be contacted (through abdi) and invited to participate in the study.
5. Once participants have accepted the invitation, consent forms will be sent out. These can be signed and returned to abdi, who will pass them on to the researcher.
6. Following consent, abdi will send copies of the participant's assessment to the researcher.

7. The researcher will make initial contact with the participant via email, requesting a suitable time to call for a short telephone interview (10 to 15 minutes).
 - The interview will cover: introductions/re-acquaintance, information on the study, preferred approach (email, bi-weekly/monthly telephone interviews, weekly diaries, etc.), exchange of contact information, explain their rights as a participant (confidentiality, right to withdraw at any time, etc.), recording format, etc.
 - The researcher will set up a schedule of contact with the participant and send via confirmation email
8. The researcher will carry out data collection as agreed with each participant, fitting around his or her schedule.
9. Once identified and introduced by abdi, key informants (abdi's experts and facilitators) data collection will follow the process from step 7.

Appendix 5 – Observation: Workshop Outline

Section A: Day 1

1. Introduction: facilitator and participants introduce themselves. The participants share their backgrounds: names, organisations, roles (accountable for and responsibilities), and why they are doing the course (personal and organisational goals for the course).
 - a. Exercises – Your Experience and Bloom’s Taxonomy
 - b. Case Study – Supervisory Management Training
 - c. The V Diagram
2. Overview of the abdi ROI recommended approach
 - a. What is ROI?
 - b. History of the approach
 - c. The levels in the approach
 - d. The Process Model
 - e. Chain of Impact
 - f. The Rules & Exercise (the rules)
 - g. The Templates: Justification, Needs and Objectives, Data Collection Plan, Data Analysis part 1 and 2, Cost Sheet and Schedule (Gantt chart)
3. Investment Planning
 - a. Pre-work – Justification for project (each participant talks about their projects)
 - b. Baseline data (L4 to L1) & Exercise (Realms of paper)
 - c. Stakeholders & Exercise (stakeholders for own projects)
 - d. Establishing Needs (L4 to L1)

- e. Setting SMART objectives (L5 to L1) & Exercise (Matching objectives to levels)
- f. Data Collection Plan (L5 [includes explanation and example of ROI] to L1)
- g. Case study – Supervisory Management Training
- h. Exercise – Progress check 1 (answers discussed as a group)
- i. Homework – complete Needs and Objectives for individual projects
- j. Reflection

Section B: Day 2

1. Homework – each participant share their homework; facilitator provides feedback
2. Measurement (L1 to L5)
 - a. Exercises (Key indicators (2) & Data collection plan)
 - b. Case study – Supervisory Management Training
3. Analysing Results (L1 to L5 – includes isolation techniques) & Exercise (L4 factors & Credibility)
 - a. Reflection
 - b. Calculating ROI (includes introduction to the Cost Management Tool)
 - c. Case study – Supervisory Management Training
 - d. Exercise – Progress check 2 (answers discussed as a group)
4. Reporting Results
5. Assessment Requirements
6. Exercise – Bloom's Taxonomy
7. Workshop feedback

Appendix 6 – Interview Guideline

This guideline was used with participants who had some experience using the abdi ROI recommended approach.

Introduction: _____, thank you for completing the Consent Form.

SECTION A

1. Would you briefly describe your role in your organization?
 - a. What is your professional/managerial training and career so far?
2. Thinking back to when you first found out about abdi's ROI approach, would you please tell me why you wanted to learn more about this evaluation approach?
 - a. Were there particular issues or challenges that you thought this approach might help with? (If so, probe for examples of such issues)
 - b. How were projects (of that sort) in your organization planned and evaluated? (Other evaluation methodologies used then/now?)
 - c. Who made decisions about their future?
 - d. How well did that work?
3. Can you give me an example of a time when differences and disagreements arose over these decisions? What were these about and who were the disagreements between?
 - a. Was that at all typical? (Probe for who is involved and relations between HR/'soft' and finance/Ops/'hard' functional areas)

SECTION B

I am interested in your thoughts about the abdi ROI recommended approach:

1. When did you go on your Foundation workshop?
2. Did you follow up with the Evaluator and/or Practitioner awards?

- a. If yes, which one(s) and when did you do these?
- 3. Did you start implementing this approach immediately?
- 4. How has learning and implementing this approach changed how you worked?
- 5. Were there features of the approach that you thought were particularly relevant to the sorts of issues in your organization that we have been discussing?
 - a. What were they?
- 6. Likewise, were there features of the abdi ROI approach that you found problematic or more challenging to apply?
 - a. What were they?
- 7. Were there any changes/adjustments made so that the abdi ROI approach worked better or more easily for you?
 - a. What were they?
- 8. Have you seen any impact on the organization since you've started implementing this approach?

SECTION C

Let's talk a little bit more about applying this approach.

- 1. What types of applications do you normally evaluate?
 - 1. (Training programme, improvement project, and social change programme?)

Data Collection and Analysis

- 2. At what levels do you normally evaluate your initiatives?
- 3. What types of data do you normally collected? (This may require a follow up email because of the variety.)

4. What data collection instruments do you use? (surveys, interviews, assessments, action plans)
5. What/Who are your typical data collection sources?
6. What are some of the techniques you use for isolation? (control groups, time line analysis, estimates, forecasting)
7. What are some of the cost categories used? (initiative costs, materials, evaluation, admin)
8. Which data do you normally convert to monetary value? (employee time, profit/savings from initiative)
9. What are some of the techniques used to convert to monetary values? (staff hourly rate, average recruitment cost)
10. What are some intangibles you've used in your implementations? (customer satisfaction, staff satisfaction, improved team work)
11. Would you share 1 really successful implementation and 1 that did not go so well?
 - a. Successful implementation:
 - b. Unsuccessful implementation:
12. What are some barriers and enablers to implementation in your organisation?
 - a. Barriers
 - b. Enablers
13. Who are your typical stakeholders?
14. How do your stakeholders normally respond throughout implementation?

Closing: Thank you very much for your time and your responses. Your input will be incorporated with other interviews to inform the results. This is a 3-year project but I will have interim results published over the period.

Appendix 7 – Data Analysis Plan

1. Import transcripts of interviews and field notes, as well as documents collected, into NVivo.
2. Template analysis – code data using appropriate coding methods (Leech and Onwuegbuzie, 2007; Leech and Onwuegbuzie, 2008; Leech and Onwuegbuzie, 2011):

- a. First Cycle Coding

Reading the data more than once and applying applicable methods.

Structural – application of a content-based or conceptual phrase to a segment of data that corresponds to a topic of enquiry, which relates to a specific research question used to frame the interview. Similarly coded segments are collected together for further detailed coding and analysis.

In Vivo – application of a word or short phrase found in the qualitative data that is used by the participants themselves.

- b. Second Cycle Coding

3. *Pattern* – application of explanatory or inferential codes that identify emergent themes, configurations or explanations. These codes pull together the material into more meaningful and parsimonious unit of analysis. It is a way of grouping summaries into a smaller number of sets, themes, or constructs.

- a. Combine *codes* to create *categories* and then combine *categories* to create *themes* applying constant comparison and keyword-in-context (KWIC) analytical tools.
(Saldana, 2009)

4. Prepare units for each context – corporate, health service and international development (descriptive framework).
 5. Use thematic and constant comparison analysis to identify the pattern within and across each context, then cross-case synthesis to aggregate the data.
 6. Data display analysis – matrix and mapping.
 7. Re-examine the data and text relating to each theme.

Appendix 8 – Sample of Quotations from Interviews with Participants (Data Collection)

Table 20: Sample of Quotations from Interviews with Participants (Data Collection)

<p>Corporate:</p> <p><i>"I think the thing is, another dislike for it, is simply the hurdles that we have to overcome, or haven't overcome yet. I think data is a big one because we have an interesting structure within our business because we effectively got 5 [members of the group], they've all got different strategies and, and agendas, and they all have different sets of data, they might actually measure the same thing differently, with differently methodology so therefore actually getting that data and being able to benchmark it is quite difficult. And there isn't a kind of central location for that data. I think also the fact that, that we are training other companies is a huge issue for us. It's not actually our, I would like to think that it is much easier to implement this with your own workforce."</i> [Cory, interview 1]</p> <p><i>"That's the balance as well. I find that, in any activity you've got to have clean data otherwise what [...], how do you know what you're doing. On the other hand, can you work, at least start with 80% clean data knowing that you've got to clean that up, otherwise you just spend all of your life trying to get 100% clean data. So that balance is very difficult."</i> [Cynthia, interview]</p> <p><i>"But that's back to what I was saying about there's a lot of expectation then on people to be constantly supplying you with that data when that's a job they don't expect to have to do. So you've got to make it as electronic, as quick, and as easy as you can so that... I mean, you can't be going and doing a focus group with a manager, you know, every time somebody goes on a piece of training. But at the same time, not dumb it down so far as actually the data's meaningless. So, yes, we've been talking about that and how we might use our LMS to gather that kind of feedback from managers so that it's an email that pops into their inbox: it's a quick link with two or three quick questions to answer. We're trying to keep the learning outcomes that comes from each of our courses to maximum five and it's usually three, three to five, so that then we can actually then keep those contextual questions about settled behaviour to a minimum as well. Again, so not too</i></p>
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short to be meaningless, but not too onerous on the person to give us the feedback.” [Carla, interview]

Health Service:

“...but actually from where I sit now what the biggest challenges are: quality data in a timely way, because quite often I have to wait three months before data comes through, it’s just the way the systems work, outside of your power and influence; and, engagement of people that don’t understand the process.” [Hannah, Hannah and Harriet, interview]

“I think it’s just the lack of external data that’s out there. I don’t think there’s anything that’s very specific that supports our needs, really. Data collection is really, really bad in that, I think the way that we share data between providers and the [HN] needs to improve, and I think they recognise that. The data returns are not great, so in terms of relying on, Thank goodness we had the college data and the means to collect that, because if we didn’t have it, reliance on other data collection methods would have been hideous, you know, particularly for getting that level zero data. I’m just trying to think. Getting the level one data, because, if you’ve got students who’ve finished they don’t have a motivation to fill in an evaluation form for you. So the point at which we did our data collection could only be once the students were finished, to get the final reaction from them, so we only got 42 responses, I think, so that’s less than half. And what we’ve done now to mitigate that risk for next time is that the college has actually put the evaluation in at the end, before they actually can send off for the certificate, so the students can’t be signed off as complete until they’ve done their evaluation.” [Harriett, interview 2]

International Development:

“And we found it difficult, actually to really tie down the benefits in the year that the evaluation and implementation was being done because some of the effects happened further down the line. So we certainly got very good information about how well it was actually being implemented and picking up our barriers and enablers that make some countries perform better than others in terms of how well they were implementing the system as designed.” [Isaiah, interview 3]

"Yes, we have isolation questions. So we also develop guidelines: how to use our banks of questions, etc. So after selecting the data for level four we were collecting data for level four, we also asked the country project managers to ask two questions which are about isolation and I also used them when I was collecting data in [...] and in other countries. And [one of her team members] she did it, and [the other team member] did it. It didn't work. In all the cases we did have problems. The problems are that people don't understand why we ask the questions about the percentage, the attribution, we ask... the questions are about - I didn't take the guidelines, but I can send them to you - the questions are, what are the external factors contributing to the same, say, change or whatever the situation is and the evaluation is about. And we ask about their estimation in terms of percentage of the attribution of the product of this change. The third question: how confident are they in terms of percentage. And in this way we want to calculate the things. What happens is that usually when we talk with the people we give them attention to and it is our external stakeholders who want to be engaged with us longer and longer who are part of some big events and really position themselves for other things. They want to please us. And they say a big percentage. And very often it's not... I can see that they just want to please us and I don't think it's a very credible way." [Ingrid, interview]

"So, you know, its fine me being the M&E [monitoring and evaluation] expert but I'm based in the UK and able to visit twice a year maybe and it's a relatively expensive input, whereas if you actually had a monitoring and evaluation team locally, maybe it's one person, they could do quite a lot of the interviewing and follow up, particularly the gathering of data, which is hugely time consuming and difficult in many developing country cases." [Ian, interview 2]

Appendix 9 – Service-Dominant Logic

Service-Dominant (SD) logic is structured around four axioms and foundational premises (FP), with six additional FPs classified under the four axioms. They have been reproduced here (Lusch and Vargo, 2014):

1. *Axiom 1 and FP1* – Service is the fundamental basis of exchange

FP2 – indirect exchange masks the fundamental basis of exchange

FP3 – goods are distribution mechanisms for service provision

FP4 – operant resources are the fundamental source of competitive advantage

FP5 – all economies are service economies

2. *Axiom 2 and FP6* - the customer is always a co-creator of value

FP7 – the enterprise cannot deliver value, but only offer value propositions

FP8 – a service-centered (sic) view is inherently customer oriented and relational

3. *Axiom 3 and FP9* – all economic and social actors are resource integrators

4. *Axiom 4 and FP10* – value is always uniquely and phenomenologically determined
by the beneficiary

These axioms and FPs have changed since they were first introduced and further amendments are currently being carried out.

Lusch and Vargo (2014, p. 33) developed SD Logic as “a more unifying and transcending view of business and, more broadly, economic and social organization.” This was acquiesced by Grönroos and Gummerus (2014, p. 207), who believed that SD logic “tends to be geared towards describing the service perspective on an aggregate, societally oriented level”. This description is appropriate for this study since service in three different contexts is being explored and an aggregated view is required to discuss the phenomena studied. Using SD logic in this way is congruent with other scholars who use SD logic as a lens to view a particular phenomenon being investigated. For example, management education by Ford and Bowen (2008), strategic business practice by Karpen et al. (2012) and public service management by Osborne et al. (2013).

In this logic service is viewed as the basis for economic exchange (FP1) and is defined as “the application of competences (knowledge and skills) for the benefit of another entity or the entity itself” (Lusch and Vargo, 2014, p. 64). This is appropriate to the specific applications in this study, i.e. learning services and vocational education programmes.

Within SD logic, the basic unit of analysis of service is the service system. This is a dynamic configuration of resources that are exchanged to create value for their participants with other service systems, through shared information (e.g. language, laws, measures, and methods) (Maglio and Spohrer, 2008; Spohrer et al., 2007). In this case, resources are people, organisations, technology, and value propositions that connect to internal and external service systems through shared information (Maglio and Spohrer, 2008). A key behaviour of service systems is that they interact to co-create value (Maglio et al., 2009). Service systems are also open and complex, adaptive systems capable of improving their own and other(s) states (Maglio et al., 2009; Spohrer et al., 2007). Maglio et al (2009, p. 2) listed many types of service systems, e.g. “people, corporations, foundations, non-governmental organizations, non-profits, government agencies, departments in an organization, cities, nations, and even families”. The key to improvement is increasing competences (knowledge and skills) of the entities in the service system (Maglio and Spohrer, 2008).

During this study the term ‘service system(s)’ referred to organisations (for the corporate and health service contexts) and communities (for the international development context). Vargo and Lusch’s (2008b) point out that SD logic, with its service-for-service foundation, provides a common lens for viewing various theories and logics, and in this case, the different types of service systems in these sectors/contexts.

In SD logic, resources “are anything that an actor can draw on for support” and there are two types – operand and operant (Lusch and Vargo, 2014, p. 159). Operand resources “are generally static resources that require some action to be performed on them before they can provide value” e.g. goods or natural resources, while operant resources “are resources capable of acting on other resources to create value (given appropriate circumstances)” (Lusch and Vargo, 2014, p. 66). They are usually intangible, dynamic resources capable of creating value and typically human (e.g. knowledge and skills of employees), organisational (e.g. controls, routines, cultures and

competences), informational (e.g. knowledge about market segments, technology and competitors) and relational (e.g. relationships with suppliers, customers and competitors) (Madhavaram and Hunt, 2008; Vargo and Lusch, 2008a).

Edvardsson et al (2011) argue that SD logic would benefit from viewing the role of operant resources as embedded in social systems, which are actively constructed by the participating actors. They add, "...value co-creation necessarily follows social structures and takes place within social systems in which the actors (customers and companies) adopt certain social positions and roles as they interact and reproduce social structures" (Edvardsson et al., 2011, p. 330). The participants in this study were embedded in their socially constructed service systems, which influenced their experience during the application of the ROI approach.

A short discussion about the SD logic lexicon is important here because the lexicon communicates meaning and helps coordinate thought among the community that supports and uses the logic (Lusch and Vargo, 2014). The literature for SD logic, and in fact the language itself, was founded in the corporate lexicon (private/for profits). However, SD logic is a useful lens for other contexts, as shown in Osborne et al's (2013) paper, *A new theory for public service management? Toward a (public) service-dominant approach*. Axiom 1/FP4 states "operant resources are the fundamental source of *competitive* advantage" (emphasis added), while axiom 2/FPs 6 to 8, include "enterprise" and "customer". These terms would not normally be used in international development, where projects focused on issues such as equality and education are carried out. Yet, as shown in chapter 6, service exchange is very much taking place in this context and actors are "...attempting to increase the viability of a system through exchange and resource integration" (Lusch and Vargo, 2014, p. 197) and thereby participating in value co-creation. Therefore, these axioms and FPs would be better written as:

- Axiom 1 and FP4 – operant resources are the fundamental source of *competitive strategic* advantage (as Lusch and Vargo (2014) indicated in their book).
- Axiom 2 and FP6 - the *customer service user* is always a co-creator of value
 - FP7 – the *enterprise organisation* cannot deliver value, but only offer value propositions

- FP8 – a service-centered (sic) view is inherently ~~customer~~ *service user* oriented and relational

A *customer* is someone who purchases a service and since the customer is not necessarily the user, this term is not broad enough to capture the human actor who is participating in the service exchange in international development. *Service user* more broadly represents the human actor who is co-producing value during this service exchange. '*User*' suggests someone who is actively co-producing in the service experience, rather than '*recipient*' or '*beneficiary*' that implies a more passive relationship, where the service is being done to them. Also, *enterprise* refers to business, usually for-profit and is therefore not broad enough as well. Instead, *organisation* refers to all types of institutions whether private, public or not-for-profit and more aptly capture the message of FP7.

In this study, human actors and human operant resources have been classified as (service) participants. This term is used as a general term to capture all the people/humans within the service exchange – the key element in the service exchange. The term *participant* also reflects the views of practitioners in international development that have long advocated for participative approaches, e.g. Robert Chambers (1994). This term implies the active involvement of service providers, service acquirers and service users – each playing their role to co-produce value but also affecting the resulting impact of the service exchange. Service providers would include the employees (or other representatives) from the organisation that represent the organisation to the service acquirer and service user. The service acquirer is the person who purchases or makes the agreement for the service, e.g. parents and guardians. The service user is the person who engages in the service experience and includes customers, guests, patients, family or friends of patients, volunteers and beneficiaries. The service acquirer and the service user can be the same person.

The SD logic lexicon can also add two other concepts to its lexicon – philanthropy and justice. SD logic defines a value proposition as “a representation of how an actor proposes to positively participate in value creation with a beneficial actor” (Lusch and Vargo, 2014, p. 160). Within the international development context service exchange is carried out mainly because of altruistic motives (philanthropy) and/or justice (it is the right thing to do). Isaiah, IB identified this as one of the motivating factors for his colleagues to work with IB, and as a result he used this to persuade them

to apply the ROI approach. Organisations, such as IB, present philanthropy and justice as their value propositions to service participants to get involved in their service exchange.

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